

## SUPPLEMENTAL FIGURE LEGENDS

**Supplemental Figure S1.** ChIP Analysis for the GL2 Binding to the *LRL1* and *LRL3* Upstream Regions.

**(A)** The regions amplified in the ChIP analysis, *LRL1-S1*, *LRL1-N*, *LRL1-S2* and *LRL3-N*, are schematically illustrated. The L1 box-like sequence exists in *LRL1-S1* and *LRL1-S2*, but not in *LRL1-N* or *LRL3-N*.

**(B)** Results of the ChIP analysis of the regions illustrated in **(A)** are shown. Relative enrichment folds (anti-GFP/IgG) in *GL2pro-GFP-GL2/gl2-5* roots and wild-type roots are shown in white and gray boxes, respectively (mean  $\pm$  s.d.,  $n = 3$ ). Asterisks indicate significant differences between the enrichment folds in *GL2-pro-GFP-GL2/gl2-5* and in the wild type (\*  $P < 0.05$ ; \*\*  $P < 0.01$ , Student's *t*-test).

**Supplemental Figure S2.** Expression Analysis of the *lrl1-2* and *lrl2-2* Mutant Genes.

**(A)** The gene structures and T-DNA insertion sites of *lrl1-2* (SALK\_006430) and *lrl2-2* (SALK\_029317c) are schematically illustrated. Horizontal arrows labeled with F and R indicate the locations of the PCR primers used in **(B)**.

**(B)** The results of semi-quantitative RT-PCR analysis for *LRL1* and *LRL2* transcripts in wild-type and mutant plants are shown. Transcripts of the *TUBULIN2* (*TUB2*) gene were used as reference.

**Supplemental Figure S3.** Expression Patterns and Intensities of bHLH-GFP Fusion Proteins Driven by the *GL2* Promoter.

The GFP fluorescence signals in transgenic roots harboring *GL2pro-RHD6-GFP* **(A)**, *GL2pro-RSL1-GFP* **(B)**, *GL2pro-RSL2-GFP* **(C)**, *GL2pro-LRL1-GFP* **(D)**, and

*GL2pro-LRL2-GFP* (**E**) are shown. Bar = 100  $\mu$ m

**Supplemental Figure S4.** Root Hair Development Patterns of the Transgenic Plants Harboring the *GL2* Promoter-driven bHLH-GFP Genes.

PI-stained epidermal cells of wild-type (**A**) and *gl2-5* (**B**) roots, and transgenic roots harboring *GL2pro-RHD6-GFP* (**C**), *GL2pro-RSL1-GFP* (**D**), *GL2pro-RSL2-GFP* (**E**), *GL2pro-LRL1-GFP* (**F**), *GL2pro-LRL2-GFP* (**G**), *GL2pro-VP16-GL2 $\Delta$ N* (**H**), and *GL2pro-LRL1-GFP* and *GL2pro-RHD6-GFP* (**I**) are shown. N and H cell files, the identities of which were judged by the fact that cells in N cell files are longer than those in H cell files, are marked by “N” and “H”, respectively. Arrowheads and Arrows indicate ectopic root hairs developing from N cell files and branching root hairs, respectively. Bar = 25  $\mu$ m

**Supplemental Figure S5.** Trichome Phenotypes of Transgenic Plants Harboring Both *GL2pro-LRL1-GFP* and *GL2pro-RHD6-GFP*.

Trichomes of wild-type plants (**A**) and transgenic plants harboring both *GL2pro-LRL1-GFP* and *GL2pro-RHD6-GFP* (**B** to **D**) are shown. Bar = 250  $\mu$ m

**Supplemental Figure S6.** Sequences Surrounding the L1 Box-like Sites Recognized by GL2.

DNA sequences surrounding the L1 box-like sites that have confirmed to be bound to GL2 individually by ChIP analysis are aligned. The sites *CESA5-S*, *MYB23-S*, *PAP2-S*, and *MYB113-S* correspond to the L1 box-like sites 802-, 2,372-, 1755-, and 837-base upstream from their initiation codons, respectively. The other sites are the same as those shown in Table II. The sites, *RSL2-S3-1*, *RSL2-S3-2*, *LRL1-S1-1*,

*LRL1*-S1-2, and those in the *TT8* promoter region are omitted because they were examined for GL2 binding to more than one copy of the L1 box like-sequence. The L1 box-like sequence is highlighted. Frequently appearing bases (at 50% or higher) at each position are shadowed. The sequence composed of the frequently appearing bases is shown below the alignment.

864 genes the steady-state transcript levels of which were consistently up-regulated by the dexamethasone (DEX) treatment of the 35Spro::VP16GL2AN seedlings more than 2-fold in triplicated microarray experiments are listed.

Gene ID	average fold-change	DEX-A vs DMSO-A		DEX-B vs DMSO-A		DEX-B vs DMSO-B		DEX-C vs DMSO-C		DEX-C vs DMSO-		Annotation
		Signal fold-change	Change p-value	Signal fold-change	Change p-value							
280124_st	AT1G036340	97.76	382.04	0.00002	2194.99	0.00002	1176.27	0.00002	UBC31 (UBIQUITIN-CONJUGATING ENZYME 31); ubiquitin-protein ligase			
285233_st	AT2G36700	261.06	1001.50	0.00002	78.79	0.00002	207.04	0.00002	peptidylserine family protein			
280651_st	AT2G43550	176.88	388.02	0.00002	0.051	0.00002	157.59	0.00002	chitosan phosphate			
280166_st	AT1G179840	116.70	97.01	0.00002	137.19	0.00002	119.43	0.00002	GL2 (GLABRA 2); DNA binding / transcription factor			
256018_st	AT1G58300	111.43	194.01	0.00002	64.00	0.00002	111.43	0.00002	H04 (HEME OXYGENASE 4); heme oxygenase (deoxygenizing) / oxidoreductase			
285972_st	AT2G31980	90.51	103.97	0.00002	32.00	0.00002	222.86	0.00002	cysteine protease inhibitor-related			
259703_st	AT1G77790	80.63	59.71	0.000027	27.86	0.00002	315.17	0.00002	HOA (HEME OXYGENASE 4); heme oxygenase (deoxygenizing) / oxidoreductase			
284433_st	AT1G61810	51.98	55.72	0.00002	39.40	0.00002	64.00	0.00002	BGLU14S; hydrolase, hydrolyzing O-glycosyl compounds			
257183_st	AT3G24310	46.31	59.71	0.00002	45.25	0.000023	36.76	0.00002	MYS305 (myb domain protein 305); DNA binding / transcription factor			
282711_st	AT1G18500	43.21	42.22	0.00002	42.22	0.00002	45.25	0.00002	similar to unknown protein [Arabidopsis thaliana] (TAIR17G79160.1); similar to unnamed protein product [Vitis vinifera] (GB:CA047911.1)			
252227_st	AT3G49900	42.22	42.22	0.00002	18.38	0.00002	97.01	0.00002	BTB/POZ domain-containing protein			
251673_st	AT3G57240	40.32	55.72	0.00002	16.00	0.00002	73.52	0.00002	BGI (BETA-1,3-GLUCANASE 3); hydrolase, hydrolyzing O-glycosyl compounds			
252955_st	AT3G54560	39.40	36.76	0.00002	21.11	0.00002	78.79	0.00002	proton-dependent oligopeptide transport (POT) family protein			
258874_st	AT3G52320	39.40	48.50	0.00002	18.38	0.00002	68.59	0.00002	estrasre/lipase/thioesterase family protein			
245158_st	AT2G33100	32.75	34.30	0.00002	34.30	0.00002	29.86	0.00002	RALF18 (RALF-LIKE 18)			
247205_st	AT5G64890	32.75	90.51	0.00002	8.57	0.00002	45.25	0.00002	PROPEP2 (Elctor peptide 2 precursor)			
252555_st	AT3G45940	32.00	55.72	0.00006	13.00	0.00023	45.25	0.00008	alpha-hydroxidase, putative			
266912_st	AT2G45900	32.00	39.40	0.00002	12.13	0.00002	68.59	0.00002	similar to unknown protein [Arabidopsis thaliana] (TAIR17G61380.1); similar to I related [Medicago truncatula] (GB:ABD32828.1); contains domain P			
249940_st	AT5G22390	30.55	59.71	0.00002	48.50	0.00002	9.85	0.00002	ANAC01 (Arabidopsis NAC domain containing protein 90); transcription factor			
259574_st	AT1G53510	29.86	42.22	0.00002	13.93	0.00002	45.25	0.00002	MLP188 (MLP-LIKE PROTEIN 188)			
259953_st	AT1G74810	29.86	29.86	0.00002	27.86	0.00002	32.00	0.00002	B0R5, iron exchanger			
265170_st	AT2G23730	28.51	36.76	0.00002	14.93	0.00002	42.22	0.00002	carbonic anhydrase, putative / carbonic dehydratase, putative			
289737_st	AT5G26500	28.51	42.22	0.00002	17.15	0.00002	32.00	0.00002	CYP71B9 (cytochrome P450, family 71, subfamily B, polypeptide 8); oxygen binding			
248117_st	AT5G04500	24.65	44.45	0.00002	10.00	0.00005	26.96	0.00046	AT1G7740A (Arabidopsis thaliana heat shock transcription factor A6A); DNA binding / transcription factor			
246412_st	AT1G00750	27.22	39.40	0.00003	14.93	0.000037	34.30	0.00003	peroxiredoxin; aldo-keto reductase family, contains Ptfam profile PF00248; oxidoreductase			
266364_st	AT2G12120	27.22	34.30	0.00007	13.93	0.00002	42.22	0.00002	PROPEP2 (Elctor peptide 2 precursor)			
249277_st	AT5G18980	25.99	103.97	0.00002	13.93	0.000074	12.13	0.000092	GDSL-motif lipase/hydrolase family protein			
249491_st	AT5G29130	25.99	39.40	0.000438	14.93	0.000214	29.86	0.000037	germin-like protein; putative			
249757_st	AT5G04316	25.99	21.11	0.00004	36.76	0.00002	22.63	0.00002	proline-rich family protein			
260066_st	AT1G73610	25.40	78.79	0.00002	9.19	0.000023	22.63	0.00002	GDSL-motif lipase/hydrolase family protein			
264082_st	AT2G28570	24.25	24.25	0.00002	19.70	0.00002	29.86	0.00002	unknown protein			
259735_st	AT1G64460	23.70	25.99	0.00002	17.15	0.00002	29.86	0.00002	unknown protein			
253459_st	AT4G32060	22.63	73.52	0.00002	14.93	0.00002	10.56	0.00002	unknown protein			
258782_st	AT3G17150	22.11	21.11	0.00002	24.25	0.00002	21.11	0.00002	dihydroneopterin aldolase, putative			
247213_st	AT5G64900	22.11	27.86	0.00002	14.93	0.00000	25.99	0.00002	ATPEP1 / PROPEP1 (Elctor peptide 1 precursor)			
250702_st	AT5G06730	21.61	19.70	0.00002	12.13	0.00002	42.22	0.00002	peroxidase, putative			
255924_st	AT1G22170	21.11	22.63	0.00002	13.93	0.00002	18.38	0.00002	phosphoglycerate/bisphosphoglycerate mutase family protein			
261737_st	AT1G47885	21.11	21.11	0.000035	13.93	0.000214	32.00	0.000052	leucine-rich repeat family protein			
256864_st	AT3G29770	20.16	17.15	0.00002	19.70	0.00002	24.25	0.00002	hydrolase_alpha/beta fold family protein			
261682_st	AT1G18350	20.16	18.38	0.00002	14.93	0.00003	29.86	0.00002	ATMK1 (MAP KINASE KINASE7); kinase			
264638_st	AT1G65480	19.70	29.86	0.00002	13.93	0.00002	18.38	0.00002	FT (FLOWERING LOCUS T)			
250344_st	AT5G19300	18.81	24.25	0.00002	14.93	0.00002	18.38	0.00002	ATHB2 (ARABIDOPSIS THALIANA HOMEOBOX PROTEIN 32); DNA binding / transcription factor			
263841_st	AT2G36870	18.81	19.70	0.00002	17.15	0.00002	19.70	0.00002	xylanase/cellobiohydrolase, putative / xyloglucan endotransglycosylase, putative / endo-xyloglucan transferase, putative			
263944_st	AT2G36940	18.81	34.30	0.00006	8.00	0.00000	24.25	0.000167	cellobiohydrolase gene monooxygenase, putative (M03)			
253076_st	AT2G35520	17.55	13.93	0.00002	18.38	0.00000	21.11	0.00002	BGI (BETA-1,3-GLUCANASE 1); hydrolase, hydrolyzing O-glycosyl compounds			
251604_st	AT1G03070	17.55	9.85	0.00002	17.15	0.00002	32.00	0.00002	peptidase, peptidase/oligosaccharide-transport (POT) family protein			
249474_st	AT5G02730	17.15	13.00	0.000114	4.00	0.000046	9.01	0.00002	protein kinase C-like protein kinase			
247448_st	AT5G02770	17.15	16.00	0.00002	16.00	0.00002	16.70	0.00002	similar to unknown protein [Arabidopsis thaliana] (TAIR17G327880.1); similar to hypothetical protein [Vitis vinifera] (GB:CAN65788.1); contains InterPro domain P			
250734_st	AT5G02670	17.15	16.00	0.00002	17.15	0.00002	18.38	0.00002	similar to unknown protein [Arabidopsis thaliana] (TAIR17G328280.1); similar to unnamed protein product [Vitis vinifera] (GB:CAO15941.1)			
252388_st	AT2G48520	17.15	13.00	0.00002	13.00	0.000027	29.86	0.00002	CYP94B3 (cytochrome P450, family 94, subfamily B, polypeptide 3); oxygen binding			
264400_st	AT1G18600	17.15	24.25	0.00002	8.00	0.00002	25.99	0.00002	GPT2 (glucose-6-phosphate kinase/transferase); transporter			
249886_st	AT5G18460	16.76	19.70	0.00002	13.93	0.00002	12.15	0.00002	similar to unknown protein [Arabidopsis thaliana] (TAIR17G32340.1); similar to AT14A (Arabidopsis thaliana) (TAIR17G32340.1); contains InterPro domain P			
256407_st	AT1G68570	15.58	2.83	0.000136	11.31	0.00002	59.71	0.00002	ATB2IP2 (ARABIDOPSIS THALIANA BASIC LEUCINE-ZIPPER 2); DNA binding / protein heterodimerization/ protein homodimerization/ transcription factor			
255306_st	AT3G05350	15.00	14.93	0.000014	4.59	0.000023	10.56	0.00002	kinin receptor protein [Arabidopsis thaliana] (TAIR17Q05018.1); similar to unnamed protein product [Vitis vinifera] (GB:CAO16605.1)			
250583_st	AT5G07500	13.93	36.76	0.00002	6.96	0.00002	10.56	0.00002	PEI1; nucleic acid binding / transcription factor			
246332_st	AT3G44830	13.93	68.59	0.000013	6.06	0.00000	6.50	0.00002	leichsteinerol acyltransferase family protein			
264580_st	AT1G05340	13.93	11.31	0.00002	13.93	0.00002	17.15	0.00002	similar to unknown protein [Arabidopsis thaliana] (TAIR17G323210.1); similar to unknown protein [Arabidopsis thaliana] (TAIR17G323210.1); similar to unknown protein [Arabidopsis thaliana] (TAIR17G323210.1)			
257568_st	AT1G18750	13.61	21.11	0.00002	12.13	0.00002	9.85	0.00002	WRRY7 (WRKY DNA-binding protein 7); oxygen binding			
257846_st	AT3G05950	13.61	64.00	0.00002	5.66	0.00002	9.85	0.000035	EXLB3 (EXPANSIN-LIKE B3 PRECURSOR)			
264130_st	AT1G71610	13.61	13.00	0.00002	12.13	0.00002	16.00	0.00002	ATB10 (ATB10) (Arabidopsis thaliana) (TAIR17G16500.1); similar to unnamed protein product [Vitis vinifera] (GB:CAO47911.1)			
245274_st	AT1G47860	13.50	5.66	0.000169	8.00	0.00002	10.56	0.00002	light chain 70 kDa protein			
250988_st	AT5G02890	11.85	10.58	0.00002	11.31	0.00002	13.93	0.00002	terpene synthase/cyclase family protein			
251480_st	AT1G59710	11.85	13.00	0.00002	13.00	0.00002	9.85	0.00002	short-chain-dehydrogenase/reductase (SDR) family protein			
267559_st	AT2G45570	11.31	18.38	0.00002	10.56	0.00002	8.57	0.00002	WRI1 (WRNKLED1); DNA binding / transcription factor			
262290_st	AT2G18660	11.31	12.13	0.00002	9.19	0.00002	13.00	0.00002	supra-transports; putative			
246585_st	AT1G70965	11.06	13.00	0.00002	11.31	0.000023	9.19	0.00002	hydroxyproline-rich glycoprotein; family protein			
254049_st	AT1G01910	9.85	9.85	0.00002	9.19	0.00002	10.56	0.00002	similar to unknown protein product [Vitis vinifera] (TAIR17G01910.1); similar to unknown protein [Arabidopsis thaliana] (TAIR17G01910.1)			
249832_st	AT5G22390	9.85	7.46	0.00002	13.00	0.00002	10.56	0.00002	AS2 (ASYMMETRIC LEAVES 2)			
249306_st	AT5G14040	9.62	10.56	0.00002	6.96	0.00002	10.56	0.00002	CYP78B2 (cytochrome P450, family 78, subfamily C, polypeptide 2); oxygen binding			
251631_st	AT1G13950	9.62	9.19	0.00002	8.00	0.00002	9.85	0.00002	zinc finger (C3H4-type RING finger) family protein			
265248_st	AT2G40500	9.62	8.00	0.000389	6.06	0.00002	14.93	0.000017	ATB183 (ARABIDOPSIS THALIANA BASIC LEUCINE-ZIPPER 3); DNA binding / transcription factor			
260199_st	AT1G75750	8.77	10.56	0.00002	7.46	0.000023	8.57	0.00002	membrane protein			
282669_st	AT2G22160	8.77	10.56	0.00002	6.50	0.0000						

255577_at	AT4G01410	7.29	6.50	0.00002	8.00	0.00002	7.46	0.000027	harpin-induced family protein / HBN1 family protein / harpin-responsive family protein
261646_at	AT1G15140	7.29	6.96	0.00002	6.96	0.00002	8.00	0.00002	similar to unknown protein [Arabidopsis thaliana] (TAIRAT061740); similar to unnamed protein product [Vitis vinifera] (GB:CAO38814.1); contains i
264129_at	AT1G79170	7.29	3.48	0.000167	4.00	0.00023	27.86	0.000068	unknown protein
267591_at	AT2G39705	7.29	5.66	0.00002	9.19	0.00002	7.46	0.00002	DVL11/RTFLB (ROTUNDIFOLIA LIKE 8)
245898_at	AT5G11020	7.13	7.46	0.00002	6.50	0.00002	7.46	0.00002	kinase
246889_at	AT5G67350	7.13	4.59	0.00002	8.00	0.00002	9.85	0.00002	unknown protein
251570_at	AT3G04050	7.13	7.46	0.00002	6.06	0.00002	8.00	0.00002	similar to unknown protein [Arabidopsis thaliana] (TAIRAT3Q60440); similar to unnamed protein product [Vitis vinifera] (GB:CAO70568.1); contains i
255025_at	AT4G09900	7.13	6.00	0.00002	5.66	0.00002	8.00	0.00002	hydrolase, alpha/beta fold family protein
262730_at	AT1G18390	7.13	6.06	0.00002	8.57	0.00002	6.96	0.00002	ATC0CT3 (ARABIDOPSIS THALIANA ORGANIC CATION/CARBOHYDRATE TRANSPORTER)/carbohydrate transmembrane transporter/ sugarhydrogen ic
263931_at	AT2G36220	7.13	5.28	0.00002	6.06	0.00002	11.31	0.00002	similar to unknown protein [Arabidopsis thaliana] (TAIRAT3Q52110); similar to unnamed protein product [Vitis vinifera] (GB:CAO15901.1)
245882_at	AT5G13170	6.96	9.19	0.00002	4.92	0.00008	7.46	0.00002	nodulin MN3 family protein
246038_at	AT5G08370	6.96	9.19	0.00002	6.50	0.00002	5.66	0.00002	similar to hypothetical protein [Vitis vinifera] (GB:CAN65294.1)
260544_at	AT2G04350	6.96	7.46	0.00002	5.66	0.00002	8.00	0.00002	similar to hypothetical protein [Vitis vinifera] (GB:CAN65294.1)
235066_at	AT4G37770	6.81	6.06	0.00002	4.59	0.00002	11.31	0.00002	AC58 (1'-amino-cyclopropane-1-carboxylate synthase 8)
261580_at	AT7G01110	6.19	5.06	0.00002	3.73	0.00002	9.19	0.000114	IQD18 (IQ-domain 18)
261287_at	AT4G34500	6.01	5.06	0.00002	5.66	0.00002	10.56	0.00002	aspartate, putative
259168_at	AT5G04150	6.01	11.31	0.000114	4.29	0.00002	8.50	0.00002	DNA binding bromodomain-containing protein
264653_at	AT1G71120	6.01	13.63	0.00002	2.64	0.00002	8.57	0.00002	ADH1 (ALCOHOL DEHYDROGENASE 1)
251491_at	AT3G59490	6.05	5.66	0.00002	5.66	0.00002	9.19	0.00002	p58-type cyclerdase kinase family protein
255911_at	AT1G06930	6.05	2.46	0.00249	9.19	0.004073	13.00	0.00307	serine/threonine protein kinase family protein
258300_at	AT3G23340	6.05	8.00	0.00002	7.46	0.00002	4.59	0.00002	CKL10 (Casein Kinase II-like 10); casein kinase I' kinase
250204_at	AT5G18230	6.05	6.50	0.00002	6.96	0.000023	6.06	0.00002	ANAC07; transcription factor
250087_at	AT5G03671	6.05	7.46	0.00002	6.06	0.00002	6.06	0.00002	similar to unknown protein [Arabidopsis thaliana] (TAIRAT2G36420.1); similar to unnamed protein product [Vitis vinifera] (GB:CAO15955.1)
251385_at	AT4G35320	6.05	6.96	0.00002	6.96	0.00002	5.66	0.00002	similar to unknown protein [Arabidopsis thaliana] (TAIRAT3Q60440.1); similar to hypothetical protein [Vitis vinifera] (GB:CAN75386.1)
257483_at	AT1G49620	6.05	6.50	0.00002	7.46	0.00002	5.66	0.00002	ICKS/CN6/KRP7 (KP7-RELATED PROTEIN 7); cyclin binding / cyclin-dependent protein kinase inhibitor
262188_at	AT1G77810	6.05	6.96	0.000035	5.66	0.000027	6.96	0.000023	galactosidase/transfase family protein
264931_at	AT1G60590	6.05	11.31	0.00002	6.50	0.00002	3.73	0.00002	polygalacturonase, putative / peptidase, putative
267077_at	AT2G40910	6.05	6.96	0.00002	6.96	0.00002	5.66	0.00002	m6y family transcription factor
267587_at	AT2G24420	6.05	6.96	0.00002	5.66	0.00002	6.96	0.00002	similar to unknown protein [Arabidopsis thaliana] (TAIRAT1G55380.1); similar to unnamed protein product [Vitis vinifera] (GB:CAO67164.1); contains I
249202_at	AT5G04250	6.05	8.57	0.00002	4.59	0.000006	6.50	0.00002	CYP705A12 (cytochrome P450, family 705, subfamily A, polypeptide 12); oxygen binding
255964_at	AT1G22275	6.35	4.92	0.000078	21.11	0.000035	2.46	0.001832	ZYPT5
257469_at	AT1G49290	6.35	6.00	0.000241	4.92	0.000189	6.50	0.000078	similar to unknown protein [Arabidopsis thaliana] (TAIRAT3Q1620.1); similar to hypothetical protein [Vitis vinifera] (GB:CAN72326.1)
264228_at	AT1G67510	6.35	8.57	0.00002	6.06	0.00002	4.92	0.00002	leucine-rich repeat family protein
265261_at	AT2G04290	6.35	13.93	0.00002	3.03	0.00002	6.06	0.000023	GDSL-motif lipase/hydrolase family protein
248924_at	AT5G45960	6.20	4.00	0.000046	2.46	0.000307	24.25	0.000046	formamide 2 domain-containing protein / FH2 domain-containing protein
260565_at	AT2G04300	6.20	6.96	0.00002	5.28	0.00002	6.50	0.00002	aldo/keto reductase family protein
267181_at	AT2G23770	6.20	7.46	0.00002	5.28	0.000023	6.06	0.00002	CRP3 (CYTOKININ RESPONSE FACTOR 3); DNA binding / transcription factor
248253_at	AT5G03290	6.06	3.48	0.00002	10.56	0.000023	6.06	0.00002	ATP7B/PTP3 (PEPTIDE TRANSPORTER PROTEIN 3); transporter
260010_at	AT5G10120	5.92	6.96	0.00002	6.50	0.00003	4.59	0.00002	AHRS (CYTOKININ INDEPENDENT 2)
260173_at	AT1G05340	5.92	5.66	0.00002	4.59	0.00002	8.00	0.00002	ATM1 (ATM1); DNA binding / transcription factor
260061_at	AT5G04970	5.92	5.98	0.00004	14.03	0.000046	2.46	0.00002	peroxisomes, putative
255769_at	AT4G08560	5.92	5.28	0.000013	8.57	0.000037	4.59	0.000046	RIO (ROP-INTERACTIVE CRIB MOTIF-CONTAINING PROTEIN 7); protein binding
256877_at	AT3G28470	5.92	6.06	0.00002	4.92	0.00002	6.96	0.00002	similar to ADRI-L1 (ADRI-LIKE 1); ATP binding / protein binding [Arabidopsis thaliana] (TAIRAT4G3330.2); similar to ADRI-L1 (ADRI-LIKE 1); ATI
261953_at	AT1G64440	5.92	6.50	0.00002	6.06	0.00002	5.28	0.00002	PWD1 (ROOT HAIR DEFECTIVE 1); UDP-glucose 4-epimerase
248885_at	AT5G45850	5.92	6.50	0.00002	5.28	0.00002	6.06	0.00002	similar to unknown protein [Arabidopsis thaliana] (TAIRAT2G0930.1)
249489_at	AT5G03900	5.92	4.00	0.00002	4.92	0.000052	10.56	0.00002	transfase family protein
248832_at	AT5G04650	5.92	6.50	0.00002	4.29	0.000006	6.96	0.00002	CRP3 (CYTOKININ RESPONSE FACTOR 3); DNA binding / transcription factor
261564_at	AT1G01720	5.79	4.59	0.00002	6.50	0.00002	6.50	0.00002	ATP6/PTP3 (PEPTIDE TRANSPORTER PROTEIN 3); transporter
283439_at	AT2G28850	5.79	8.00	0.00002	3.73	0.00002	6.50	0.00002	[ATP6/PTP3 (PEPTIDE TRANSPORTER PROTEIN 3); transporter]
249255_at	AT5G01610	5.79	27.86	0.000023	1.87	0.005933	3.73	0.000027	ATCHX18 (cation/hydrogen exchanger 18); monovalent cation/proton antiporter
249614_at	AT5G07300	5.79	39.40	0.000046	2.30	0.000492	2.14	0.000473	similar to unknown protein [Arabidopsis thaliana] (TAIRAT2G38995.1); similar to unnamed protein product [Vitis vinifera] (GB:CAO48523.1); contains I
280856_at	AT1G21910	5.79	3.25	0.00002	6.96	0.00002	8.57	0.00002	AP2 domain-containing transcription factor
280981_at	AT1G05960	5.79	6.06	0.00002	6.06	0.00002	5.28	0.00002	binding
280985_at	AT1G53590	5.79	6.50	0.00002	5.66	0.00002	5.28	0.00002	MUM4 (MUCILAGE-MODIFIED 4); catalytic
261434_at	AT1G07650	5.79	6.96	0.00002	4.92	0.00002	5.66	0.00002	leucine-rich repeat transmembrane protein kinase, putative
285979_at	AT2G11150	5.79	7.46	0.000023	7.46	0.00002	3.48	0.001077	transposable element gene
257697_at	AT3G12700	5.66	6.06	0.00002	4.59	0.00002	6.50	0.00002	aspartyl protease family protein
247594_at	AT5G08080	5.66	5.66	0.00002	4.29	0.00002	7.46	0.00002	heavy-metal-associated domain-containing protein
250871_at	AT5G03930	5.66	8.57	0.000101	2.46	0.000052	8.57	0.000027	similar to unknown protein [Arabidopsis thaliana] (TAIRAT5Q03920.1)
254544_at	AT4G19820	5.66	6.50	0.00002	5.28	0.000006	5.28	0.00002	glycosyl hydrolase family 18 protein
254710_at	AT4G18050	5.66	8.57	0.00002	3.03	0.00002	6.96	0.00002	PGP9 (P-GLYCOPROTEIN 9); ATPase, coupled to transmembrane movement of substances
261675_at	AT1G18290	5.66	3.48	0.000008	18.38	0.001536	2.83	0.00241	similar to unknown [Populus trichocarpa] (GB:ABK94840.1)
262169_at	AT1G05340	5.66	5.66	0.00002	5.28	0.00002	6.06	0.00002	AM1PME (AMYLASE 1); calmodulin binding / transcription factor
262652_at	AT1G17140	5.66	6.06	0.00002	5.28	0.00002	5.66	0.00002	topogen-related
262653_at	AT5G04170	5.66	5.28	0.000006	4.92	0.000006	8.99	0.000003	DPR5 (DPSINA-BINDING PROTEIN 5); double-stranded RNA binding
249981_at	AT5G03980	5.53	6.06	0.000046	4.29	0.000052	6.50	0.00002	ATC11H (Chlorophyll-chlorophyllid hydrolyase 2)
236328_at	AT4G21970	5.53	5.66	0.00002	5.66	0.00002	5.28	0.00002	SLAH2 (SLAC1 HOMOLOGUE 2); transporter
257300_at	AT3G28890	5.53	6.96	0.00002	4.29	0.00002	5.66	0.00002	similar to unknown protein [Arabidopsis thaliana] (TAIRAT3Q54200.1); similar to plant cell wall protein SITFR88 [Lycepsicon esculentum] (GB:ABF3)
266598_at	AT2G46150	5.53	6.50	0.00002	4.29	0.00002	6.06	0.00002	similar to unknown protein [Arabidopsis thaliana] (TAIRAT5Q03920.1)
246283_at	AT4G36860	5.53	6.50	0.00002	5.28	0.000006	4.92	0.00002	zinc ion binding
274229_at	AT5G05160	5.53	3.73	0.00002	9.19	0.00002	4.92	0.000101	tetratricopeptide repeat (TPR)-containing protein
284001_at	AT1G30640	5.53	6.06	0.00002	3.00	0.000006	3.03	0.00002	peroxidase 17 (PER17) (P17)
251553_at	AT1G18570	5.42	4.29	0.00002	2.83	0.00002	9.85	0.000078	CKX3 (CYTOKININ OXIDASE 3); cytokinin dehydrogenase
262114_at	AT1G02880	5.42	6.06	0.00002	4.92	0.00002	4.00	0.00002	NLA (NITROGEN LIMITATION ADAPTATION); protein binding / zinc ion binding
249497_at	AT5G39220	5.42	5.28	0.00002	3.25	0.000114	6.96	0.000027	hydrolase, alpha/beta fold family protein
251223_at	AT3G26180	5.42	7.46	0.00002	9.85	0.000618	1.62	0.003699	AMWY11 (myb domain protein 10); DNA binding / transcription factor
247744_at	AT5G58860	5.41	4.00	0.00002	4.00	0.000027	5.28	0.00002	oxidoreductase, 2OG-Fe(II)-oxigenase family protein
246403_at	AT2G25150	5.41	5.66	0.00002	3.73	0.000046	6.06	0.000023	transferase family protein
246502_at	AT5G16240	5.41	4.92	0.00002	5.66	0.00002	4.29	0.00002	aspartyl (acyl-carrier-protein) desaturase; putative / stearoyl-ACP desaturase; putative
251013_at	AT5G02540	5.41	8.57	0.00002	3.03	0.00002	4.59	0.00002	short-chain dehydrogenase/reductase (SDR) family protein
251291_at	AT3G19160	5.41	4.29	0.00002	4.59	0.000006	6.06	0.00002	sensinase-related protein family
251553_at	AT1G18570	5.41	4.29	0.00002	2.83	0.00002	4.92	0.00002	MYB51 (MYB DOMAIN PROTEIN 51); DNA binding / transcription factor
262114_at	AT1G27010	5.41	6.96	0.00002	4.59	0.00002	3.48	0.00002	similar to unknown protein [Arabidopsis thaliana] (TAIRAT1G17030.1); similar to hypothetical protein [Vitis vinifera] (GB:CAO67131.1); similar to unnamed protein product [Vitis vinifera] (GB:CAO17389.1); contains domain PTHR1067SF2 (PTH1067SF2); contains domain PTHR1096
262651_at	AT1G17550	5.41	4.00	0.00002	4.59	0.00002	4.92	0.00002	similar to unknown protein [Arabidopsis thaliana] (TAIRAT1G261700.1); similar to unknown [Populus trichocarpa] (GB:AK95362.1)
247228_at	AT5G05160	5.41	4.59	0.00002	3.03	0.000023	6.96	0.00002	sensinase-containing protein
247567_at	AT5G								

245282_at	ATIG05650	4.19	6.50	0.000078	3.48	0.001651	3.25	0.003355	PAPI (PRODUCTION OF ANTHOCYANIN PIGMENT 1); DNA binding / transcription factor
247383_at	ATGS03410	4.19	6.06	0.00002	3.73	0.00002	3.25	0.00002	leucine-rich repeat transmembrane protein kinase, putative
248443_at	ATGS05130	4.19	4.00	0.00002	4.59	0.000023	4.00	0.00002	gibberellin-20-oxidae-related
260135_at	ATIG06400	4.19	3.48	0.000027	5.28	0.00002	4.00	0.000035	calmodulin-related protein, putative
245336_at	ATIG16515	4.19	4.92	0.00002	3.48	0.00002	4.29	0.00002	unknown protein
249474_at	ATSG02460	4.19	5.28	0.00002	2.83	0.000078	4.92	0.000023	similar to unknown protein [Arabidopsis thaliana] (TAIRAT3G18215.1); similar to unnamed protein product [Vitis vinifera] (GB:CA065983.1); contains I
251066_at	ATSG01880	4.19	6.00	0.000052	2.46	0.00002	3.73	0.000068	zinc finger (C3H4-type RING finger) family protein
252170_at	AT3G04080	4.19	3.48	0.00002	2.83	0.00003	7.46	0.000023	HRM (HOMOLOG OF IPW8 4)
255795_at	AT2G33380	4.19	7.46	0.00002	2.64	0.00002	3.73	0.00002	RD20 (RESPONSIVE TO DESICCATION 20); calcium ion binding
261116_at	AT1G75370	4.19	4.92	0.00002	3.73	0.00002	4.00	0.00003	SEC14 cytosolic factor, putative / phosphatidylinositol transfer-like protein, putative
264287_at	AT1G01930	4.19	4.92	0.00002	3.48	0.00002	4.29	0.00002	similar to unknown protein [Arabidopsis thaliana] (TAIRAT1G11700.1); similar to unnamed protein product [Vitis vinifera] (GB:CA017934.1); contains I
245485_at	ATIG01820	4.09	5.28	0.000389	2.30	0.001032	5.66	0.000078	GDSL-motif lipase/hydrolase family protein
247461_at	ATSG02100	4.09	3.73	0.00002	4.59	0.00002	4.00	0.00002	ATBAC2 (ARABIDOPSIS THALIANA BCL-2-ASSOCIATED ATHANOGENE 2)
248801_at	ATSG03730	4.09	4.59	0.00002	3.48	0.00002	4.29	0.00002	HAT2; transcription factor
250201_at	ATIG01420	4.09	5.28	0.00002	2.83	0.00002	4.59	0.00002	ankyrin repeat family protein
252680_at	ATIG00400	4.09	6.50	0.000068	3.48	0.000074	3.00	0.000068	similar to unknown protein [Arabidopsis thaliana] (TAIRAT2G07090.1); similar to unnamed protein product [Vitis vinifera] (GB:CA040899.1); contains I
255644_at	AT4G03050	4.09	4.39	0.00002	4.00	0.00002	4.00	0.00002	microtubule-associated protein
253065_at	ATIG07630	4.09	4.29	0.00002	4.00	0.00002	4.00	0.00002	DYNS1 (CYTOSKELETON-DEPENDENT PROTEIN KINASE)
253099_at	ATG02620	4.09	4.92	0.000088	2.64	0.00002	5.28	0.00002	ACST7 (Acetyl-coenzyme A-carboxylate synthase 7); 1'-aminocyclopropane-1-carboxylate synthase
254384_at	ATIG01870	4.09	4.29	0.00002	3.25	0.00002	4.92	0.00002	26-kDa class P-related heat shock protein (HSP28.5-P)
256073_at	AT1G18100	4.09	9.19	0.000027	1.32	0.001468	5.66	0.00002	E12A11; phosphotyrosine-binding
256489_at	ATIG01550	4.09	5.28	0.00002	3.48	0.00002	3.73	0.00002	GDSL-motif lipase, putative
257560_at	AT3G14960	4.09	3.73	0.00002	3.73	0.00002	4.82	0.00002	palmitoyltransferase family protein
259884_at	AT3G06880	4.09	5.28	0.00002	3.48	0.00002	3.73	0.00002	leucine-rich repeat transmembrane protein kinase, putative
259071_at	AT3G11650	4.09	3.73	0.00002	3.73	0.00002	4.92	0.00002	NHL2 (NDRI/HINI-like 2)
259222_at	AT3G03860	4.09	4.59	0.00002	3.73	0.00002	4.00	0.00002	C2 domain-containing protein
262072_at	ATIG05950	4.09	2.83	0.00002	3.48	0.00002	6.96	0.00002	ZCF37
248879_at	ATIG05450	4.00	3.73	0.000027	4.29	0.00000	4.00	0.000023	ATPP2-A6 (Phosphotrotein 2-A6); transmembrane receptor
248991_at	ATSG04520	4.00	2.83	0.000027	3.25	0.000101	6.96	0.000241	Toll-Interleukin-Resistance (TIR) domain-containing protein
251594_at	AT3G07830	4.00	4.59	0.00002	3.25	0.00002	4.29	0.00002	exostosin family protein
258328_at	AT3G22760	4.00	4.59	0.00002	3.48	0.00002	4.00	0.000068	SOL1 (TS1-Like); transcription factor
261581_at	AT1G01140	4.00	3.48	0.00002	4.00	0.00002	4.59	0.00002	CIPK9 (CBL-INTERACTING PROTEIN KINASE 9); kinase
262124_at	ATIG09660	4.00	4.00	0.0000492	3.25	0.000088	4.92	0.000035	nucleoporin family protein
262885_at	ATIG01470	4.00	3.48	0.00002	3.73	0.00002	4.92	0.00002	TAU11 (ALPHA-1 TUBULIN)
247109_at	ATSG05870	3.91	4.00	0.00002	3.48	0.00002	4.29	0.000048	ATPKS1 (PHYTOSULFONE 5 PRECURSOR); growth factor
250292_at	ATIG03220	3.91	3.25	0.000046	2.46	0.000189	7.46	0.000029	JAS1/JAZ10/TIF9/TIF9 (JASMONATE-ZIM-DOMAIN PROTEIN 10)
253423_at	AT4G02220	3.91	3.25	0.00002	4.59	0.00002	4.00	0.000035	IAA29 (indoleacetic acid-induced protein 29); transcription factor
253827_at	AT4G02805	3.91	4.59	0.00002	2.14	0.00013	6.06	0.00002	unknown protein
259975_at	AT1G16470	3.91	6.06	0.000023	2.00	0.000046	4.92	0.00002	cinnamoyl-CoA reductase
260121_at	ATIG01400	3.91	5.01	0.000007	3.66	0.000023	4.29	0.00002	similar to unknown protein [Arabidopsis thaliana] (TAIRAT5G16720.1); similar to unknown [Populus trichocarpa] (GB:ABK32464.1); similar to Os03g02
260713_at	AT4G00900	3.91	3.48	0.00002	2.46	0.00002	6.96	0.00002	similar to unknown protein [Arabidopsis thaliana] (TAIRAT3G18580.1); similar to hypothetical protein [Vitis vinifera] (GB:CAN78728.1); similar to unna
261536_at	AT2G05210	3.91	4.29	0.00002	4.00	0.00002	3.48	0.00002	auxin-binding protein-related
261605_at	ATIG04980	3.91	4.29	0.00002	4.00	0.00002	3.48	0.00002	calcium-dependent protein kinase, putative / CDPK, putative
240494_at	AT5G03890	3.82	2.46	0.001468	3.48	0.000966	6.50	0.00002	transferrase family protein
252189_at	AT3G00070	3.82	4.00	0.00002	3.25	0.00002	4.29	0.000035	CYC303 (CYCLIN D33); cyclin-dependent protein kinase
253088_at	AT4G02820	3.82	3.48	0.00002	3.73	0.00002	4.29	0.00002	FAH1 (FERULATE-5-HYDROXYLASE 1); ferulate 5-hydroxylase
259197_at	AT3G03618	3.82	2.14	0.003355	4.00	0.000113	6.50	0.00133	peroxidase
259988_at	AT1G08120	3.82	14.93	0.000037	1.74	0.001468	2.14	0.003355	ATPP3/BPB/BPC3/BPC3 (BASIC PENTACYSTEINE 3); DNA binding / transcription factor
280924_at	AT1G21590	3.82	4.59	0.00002	3.25	0.00002	3.73	0.00002	protein kinase family protein
266637_at	AT2G35600	3.82	13.00	0.000048	1.87	0.000389	2.30	0.00002	BRLX1 (BREV1 RADIX like 1)
267498_at	AT2G45720	3.82	4.59	0.00002	3.25	0.00002	3.73	0.00002	armadillo/beta-catenin repeat family protein
245080_at	AT2G23300	3.82	4.92	0.000078	2.83	0.000027	4.00	0.000189	leucine-rich repeat transmembrane protein kinase, putative
246597_at	AT5G14760	3.82	5.28	0.00002	2.64	0.00002	4.00	0.00002	AO (L-ASPARTATE OXIDASE); L-aspartate oxidase
249231_at	AT5G04200	3.82	4.59	0.00002	3.48	0.00002	3.48	0.00002	ABL4 (ABL INTERACTOR-LIKE PROTEIN 4)
252606_at	AT3G04510	3.82	4.00	0.00002	3.73	0.00002	3.73	0.00002	SCP480 (serine carboxypeptidase-like 48); serine carboxypeptidase
253140_at	AT4G05450	3.82	4.00	0.00002	2.83	0.00002	4.92	0.00002	RHA3B (RNG-H2 finger A3B); protein binding / zinc ion binding
253493_at	AT4G18120	3.82	3.03	0.000023	3.25	0.00002	5.66	0.00002	ENP (ENHANCER OF PINOID); signal transducer
254706_at	AT4G17950	3.82	4.29	0.00002	3.73	0.00002	3.48	0.00002	DNA-binding family protein
261471_at	AT1G14460	3.82	4.00	0.00002	4.00	0.00002	3.48	0.000046	DNA polymerase-related
266187_at	AT2G03870	3.82	4.59	0.00002	3.73	0.00002	3.25	0.00002	zinc finger (C3H4-type RING finger) family protein
267425_at	AT2G03410	3.82	3.25	0.00002	4.29	0.00002	4.00	0.00002	FBD-binding domain-containing protein
274005_at	AT1G07520	3.73	4.00	0.0000167	4.00	0.000052	3.48	0.000088	AP2 domain-containing transcription factor, putative
274041_at	AT5G01400	3.73	4.00	0.000003	4.00	0.00002	3.25	0.00002	SNRK2-5/SNRK2/SNRK2 (SNF1-RELATED PROTEIN KINASE 2.5); kinase
247492_at	AT5G03650	3.73	4.29	0.00002	2.64	0.00002	4.59	0.00002	SNRK2 (SNF1-RELATED PROTEIN KINASE 2); kinase
255030_at	AT1G09040	3.73	3.25	0.000114	2.83	0.00004	5.66	0.00002	unknown protein
253796_at	AT1G08460	3.73	2.94	0.000101	2.14	0.00003	9.19	0.00002	protein kinase family protein
254015_at	AT4G01610	3.73	5.28	0.00002	2.83	0.00002	3.48	0.00002	peptidyl-cysteine 12'-beta-galactosidase
258037_at	AT3G01230	3.73	4.29	0.00002	3.03	0.00002	4.00	0.00002	ACLU5 (COMARATE-COO LIGASE 5); 4'-coumarate-CoA ligase
260088_at	AT1G07380	3.73	2.00	0.00002	4.00	0.00003	6.50	0.00002	calmodulin binding
262181_at	AT1G07800	3.73	4.59	0.00002	3.48	0.00002	3.25	0.00002	glycosidase hydrolase family 47 protein
262590_at	AT1G15100	3.73	4.59	0.00002	3.48	0.00002	3.25	0.00002	RHA2B (RNG-H2 finger A2B); protein binding / zinc ion binding
265899_at	AT2G24260	3.73	4.29	0.00002	3.03	0.00002	4.00	0.00002	basic helix-loop-helix (bHLH) family protein
266321_at	AT1G05660	3.73	1.87	0.000167	4.29	0.00002	5.66	0.00002	UDP-glucuronosyl UDP-glucuronyl transferase family protein
266437_at	AT1G05560	3.73	4.59	0.00002	4.00	0.00002	2.46	0.00002	xanthine/uric acid oxidase family protein
247532_at	AT5G15600	3.73	2.25	0.00002	2.14	0.00002	6.06	0.00002	chloroplast nucleoid DNA-binding protein, putative
250446_at	AT5G01770	3.73	3.03	0.00002	3.73	0.00002	3.73	0.00002	OPB1 (OBP BINDING PROTEIN 1); DNA binding / transcription factor
252210_at	AT3G05410	3.73	3.73	0.0000241	3.03	0.00003	3.73	0.00002	CPK15 (calcium-dependent protein kinase 15); calmodulin-dependent protein kinase/ kinase
254390_at	AT2G02190	3.73	2.83	0.0000473	4.29	0.000333	3.48	0.00002	Identical to UTP103 protein (At3g020910) (Arabidopsis Thaliana) (TAIRAT2G16960.1); similar to unnamed protein product [Arabidopsis thaliana] (TAIRAT5G08730.1); similar to hypothetical protein [Arabidopsis thaliana] (TAIRAT1G63540.1); similar to unnamed protein product [Vitis vinifera] (GB:CA061724.1); similar to hydroxyproline-rich glycoprotein family protein [Arabidopsis thaliana] (TAIRAT1G63540.1); similar to unnamed protein product [Vitis vinifera] (GB:CA061724.1)
260283_at	AT1G08480	3.73	5.66	0.00002	2.30	0.00004	3.03	0.0000189	binding
260845_at	AT1G07310	3.73	2.14	0.000046	2.14	0.005933	8.57	0.00002	MADS-box protein (AGL100)
261676_at	AT1G05090	3.73	4.29	0.00002	2.64	0.000114	3.48	0.00002	print, putative
262748_at	AT2G02810	3.73	3.40	0.000023	3.73	0.00002	2.83	0.0000241	GDSL-motif lipase, putative
265656_at	AT2G04240	3.73	4.92	0.00002	2.14	0.00002	3.73	0.00002	LBD16 (ASYMMETRIC LEAVES2-LIKE 18)
266608_at	AT1G06090	3.73	3.46	0.00002	3.03	0.000046	3.03	0.00002	ATP8 (ATP8-LIKE PROTEIN 8); kinase
261444_at	AT1G07540	3.73	4.59	0.00002	2.64	0.00004	3.48	0.00002	protein phosphatase 2B family protein / PP2C family protein
261932_at	AT1G07830	3.73	4.00	0.00002	3.25	0.00002	3.00	0.00002	zinc finger (C3H4-type RING finger) family protein
262703_at	AT1G13110	3.73	2.93	0.00002	2.83	0.00002	4.59	0.00002	CYP17B (cytochrome P450, family 17, subfamily B, polypeptide 7); oxygen binding
263202_at	AT1G10550</td								

267305_at	AT2G00070	3.17	3.48	0.00002	2.83	0.00002	3.25	0.00002	ATK1 (Arabidopsis thaliana K <sup>+</sup> uptake 1); potassium ion transmembrane transporter
267411_at	AT2G04930	3.17	4.29	0.00002	3.25	0.00003	2.30	0.00002	disease resistance family protein
245173_at	AT2G07520	3.10	2.64	0.00014	3.03	0.00003	3.73	0.00002	AP2 domain-containing transcription factor, putative
246195_at	AT4G36410	3.10	3.25	0.00002	2.83	0.00002	3.25	0.00002	UBC17 (UBIQUITIN-CONJUGATING ENZYME 17); ubiquitin-protein ligase
248829_at	AT5G074130	3.10	3.48	0.000167	2.14	0.00013	4.00	0.00002	Bax inhibitor-1 family / BF-1 family
249816_at	AT5G074790	3.10	2.46	0.00062	2.46	0.00249	4.92	0.00002	U-box domain-containing protein
253378_at	AT4G33310	3.10	2.64	0.000618	5.28	0.003041	2.14	0.000189	unknown protein
259526_at	AT1G12570	3.10	4.59	0.00024	2.46	0.000035	2.64	0.00002	glucosidase-methanol-choline (GMC) oxidoreductase family protein
261266_at	AT1G26770	3.10	3.25	0.00002	3.03	0.00002	3.03	0.00002	ATPEX10 (ARABIDOPSIS THALIANA EXPANSIN A10)
262228_at	AT1G68860	3.10	2.64	0.000023	3.48	0.000023	3.25	0.00002	pseudogene; protein kinase family; similar to protein kinase 1 GB:BA9A4509 Gl:7573598 from [Populus nigra]; blastp match of 71% identity and 2.4e-10
264385_at	AT1G12029	3.10	3.73	0.00002	2.46	0.00002	3.25	0.00002	similar to unknown protein [Arabidopsis thaliana] (TAIRAT1G62422.1); similar to unknown [Brassica rapa] (GB:ABL97977.1)
264588_at	AT2G17730	3.10	2.83	0.000068	2.46	0.000035	4.29	0.00003	zinc finger (C3H4-type RING finger) family protein
264824_at	AT5G03420	3.10	3.25	0.00002	3.25	0.00002	2.83	0.000088	transposable element gene
265993_at	AT2G24160	3.10	4.29	0.000035	2.46	0.000088	2.83	0.00002	pseudogene; leucine rich repeat protein family; contains leucine rich repeat domains Pfam:PF00560, INTERPROSPR001611; contains some similarity to similar to unnamed protein product [Vitis vinifera] (GB:CA056681.1); contains InterPro domain Methyltransferase_FhM (InterPro:IPR006342)
2567618_at	AT2G26680	3.75	3.00	0.00002	2.46	0.00002	3.00	0.00002	similar to unnamed protein product [Vitis vinifera] (GB:CA056681.1); contains InterPro domain Methyltransferase_FhM (InterPro:IPR006342)
249688_at	AT5G04240	3.00	3.73	0.00002	3.00	0.00002	3.00	0.00002	dehydration-resistive protein, putative
249690_at	AT5G04640	3.00	3.00	0.00002	3.00	0.000027	2.83	0.00002	zinc finger (C2H2 type) family protein
249670_at	AT5G07010	3.00	3.25	0.00002	1.62	0.000147	6.06	0.00002	mH1-related
246498_at	AT5G16230	3.00	3.48	0.00002	2.46	0.000088	3.25	0.00002	acetyl-acyl-carrier protein deacetylase, putative / steroyl-ACP deacetylase, putative
247186_at	AT5G05470	3.00	3.48	0.00002	2.46	0.00002	3.25	0.00002	similar to unknown protein [Arabidopsis thaliana] (TAIRAT4G24530.1); similar to unnamed protein product [Vitis vinifera] (GB:CA061608.1); similar to ATGEK1 / GEX1 (GAMETE RESPONSE PROTEIN)
248088_at	AT5G05480	3.00	3.48	0.000046	2.00	0.01651	4.00	0.001077	TNY (TNY); DNA binding / transcription factor
248292_at	AT5G05300	3.00	3.73	0.000023	2.30	0.00002	3.25	0.00003	similar to unknown protein [Arabidopsis thaliana] (TAIRAT4G27810.1); similar to hypothetical protein [Vitis vinifera] (GB:CA041155.1)
254573_at	AT4G19420	3.03	2.30	0.00002	3.25	0.00002	3.73	0.00002	protein kinase family protein
260364_at	AT1G07050	3.03	3.73	0.00002	3.03	0.00002	2.46	0.00002	aliphatic C-terminal domain-containing protein
261804_at	AT1G03530	3.03	4.00	0.00002	2.64	0.000023	2.64	0.00002	UDP-glucuronosyl UDP-glucosyl transferase family protein
263482_at	AT2G03980	3.03	2.83	0.00002	3.03	0.00002	3.25	0.00002	GDSL motif lipase/hydrolase family protein
263907_at	AT3G26270	3.03	3.25	0.00062	2.30	0.004925	3.73	0.000035	ABD (ABA INSENSITIVE 5); DNA binding / transcription activator/ transcription factor
264822_at	AT4G36960	2.96	2.83	0.000438	3.03	0.000006	3.03	0.00002	RAP2.10 (related to AP2.10); DNA binding / transcription factor
246911_at	AT5G25810	2.96	3.03	0.00002	3.73	0.00002	2.30	0.000035	TNY (TNY); DNA binding / transcription factor
251722_at	AT3G05620	2.96	3.25	0.00002	2.30	0.000114	3.48	0.00002	amino acid transporter family protein
252991_at	AT4G38470	2.96	2.46	0.00002	2.64	0.00002	4.00	0.00002	protein kinase family protein
253732_at	AT4G29140	2.96	3.03	0.00002	2.83	0.00002	3.03	0.00002	MATE efflux protein-related
254704_at	AT4G18020	2.96	3.73	0.000088	2.46	0.000035	2.83	0.000013	APR22 (PSEUDO-RESPONSE REGULATOR 2); transcription factor
256710_at	AT3G13810	2.96	2.83	0.00002	3.03	0.00002	3.03	0.00002	ATDOI1 (ARABIDOPSIS THALIANA INDETERMINATE(D)-DOMAIN 11); nucleic acid binding / transcription factor/ zinc ion binding
257638_at	AT3G26260	2.96	1.74	0.000968	2.14	0.000037	6.96	0.0000101	CYP701B22 (cytochrome P450, family 71, subfamily B, polypeptide 22); oxygen binding
258988_at	AT3G01820	2.96	2.83	0.00002	3.03	0.00002	3.03	0.00002	adenylate kinase family protein
259109_at	AT3G05580	2.96	3.48	0.000273	2.46	0.000088	3.03	0.000037	serine/threonine protein phosphatase, putative
262105_at	AT1G02810	2.96	3.25	0.00002	2.30	0.00002	3.48	0.00002	peptidase family protein
258050_at	AT1G02840	2.96	2.45	0.000007	2.46	0.000111	4.29	0.00002	ATOF1/P15 (OF15) (Arabidopsis thaliana); protein kinase protein (D1)
246432_at	AT1G03960	2.96	2.30	0.00002	2.46	0.000088	4.59	0.00002	similar to unknown protein [Arabidopsis thaliana] (TAIRAT1G03970.1); similar to unnamed protein product [Vitis vinifera] (GB:CA023951.1)
260558_at	AT2G02220	2.96	3.25	0.00002	2.46	0.00002	3.25	0.00002	similar to unknown protein [Arabidopsis thaliana] (TAIRAT4G21310.1); similar to unknown [Populus trichocarpa] (GB:AKB93274.1); contains InterPro <
268671_at	AT2G174130	2.96	2.83	0.00002	2.30	0.00002	4.00	0.00002	short-chain dehydrogenase/reductase (SDR) family protein
273329_at	AT2G29870	2.96	2.83	0.00002	3.25	0.00002	2.83	0.00002	zinc finger (C3H4-type RING finger) family protein
259804_at	AT1G174150	2.96	2.84	0.000273	3.25	0.000046	3.03	0.000088	similar to unknown protein [Arabidopsis thaliana] (TAIRAT1G174150.1); similar to predicted protein [Phycomyces patens subsp. patens] (GB:EDQ826
266718_at	AT2G29090	2.96	3.03	0.00002	3.25	0.000078	2.84	0.0000101	CYP707A2 (cytochrome P450, family 70, subfamily A, polypeptide 2); oxygen binding
257105_at	AT3G1530	2.96	4.29	0.00002	2.46	0.000006	2.30	0.000008	VQ motif-containing protein
259700_at	AT3G09710	2.89	4.29	0.000046	2.46	0.000114	2.30	0.000052	IQD1 (IQ-DOMAIN 1); calmodulin binding
245955_at	AT5G19730	2.89	4.29	0.00002	3.25	0.00002	1.74	0.00013	peptidase family protein
246932_at	AT5G25190	2.89	3.25	0.00003	2.64	0.000167	2.83	0.000101	ethylene-responsive element-binding protein, putative
246953_at	AT5G04580	2.89	3.03	0.00002	2.83	0.00002	2.83	0.00002	VPS60.2
247118_at	AT5G05890	2.89	2.46	0.000078	2.83	0.00002	3.48	0.000101	ACR1 (ACT DOMAIN REPEAT 1)
247708_at	AT5G05950	2.89	2.30	0.00002	2.30	0.00002	4.59	0.00002	zinc finger (C3H4-type RING finger) family protein
250277_at	AT5G12940	2.89	2.83	0.00002	2.46	0.00002	2.64	0.000088	leucine-rich repeat family protein
253679_at	AT2G29610	2.89	4.59	0.00002	2.64	0.000214	2.00	0.000203	cysteine deaminase, putative / cysteine amidohydrolase, putative
254582_at	AT4G19230	2.89	3.25	0.00002	2.46	0.000002	3.03	0.000002	CYP707A1 (cytochrome P450, family 70, subfamily A, polypeptide 1); oxygen binding
254621_at	AT4G18600	2.89	3.25	0.00003	2.83	0.00002	2.64	0.00002	WAVES (WASP/WISKOTT-AULDRIDGE SYNDROME PROTEIN-FAMILY VERPROLIN HOMOLOGOUS PROTEIN 5)
258042_at	AT3G21310	2.89	3.73	0.00006	2.46	0.000035	2.64	0.00004	similar to unknown protein [Arabidopsis thaliana] (TAIRAT1G17710.1); similar to unnamed protein product [Vitis vinifera] (GB:CA047441.1); contains I
258145_at	AT3G18200	2.89	3.25	0.00002	2.83	0.00002	2.46	0.00002	similar to unknown protein [Arabidopsis thaliana] (TAIRAT1G18200.1); similar to unknown protein product [Vitis vinifera] (GB:CA047446.1); contains InterPro <
263325_at	AT2G02420	2.89	2.83	0.00002	2.83	0.00002	3.03	0.00002	nodulin MNH1 family protein
267037_at	AT2G03820	2.89	2.46	0.00002	3.73	0.001201	2.64	0.00002	ATDOI1 (ATPG19/MDR1/MDR1-PGP19 (P-GLYCOPROTEIN 19); ATPase, coupled to transmembrane movement of substances / auxin efflux tr
267423_at	AT2G05060	2.89	2.64	0.00002	2.64	0.00002	3.48	0.00002	RAP2.2; DNA binding / transcription factor
268681_at	AT1G02600	2.89	3.00	0.00002	2.30	0.00002	3.25	0.00002	KUP11 (K+ uptake permease 11); potassium ion transmembrane transporter
249501_at	AT5G07190	2.89	3.29	0.00002	2.46	0.000006	4.29	0.00002	pectinate family protein
249450_at	AT5G14140	2.89	2.94	0.000088	3.03	0.00002	2.83	0.00002	similar to unknown protein [Arabidopsis thaliana] (TAIRAT1G03300.1); similar to unnamed protein product [Vitis vinifera] (GB:CA062788.1); contains I
253689_at	AT2G01890	2.89	2.46	0.00002	3.03	0.00002	3.03	0.00002	STY2 (STYLISH 2)
258320_at	AT2G03610	2.89	2.46	0.00002	2.83	0.00002	3.25	0.00002	similar to hypothetical protein [Vitis vinifera] (GB:CA062461.1); contains InterPro domain of unknown function DUF1218 (InterPro:IPR009806)
265517_at	AT1G62500	2.89	3.25	0.00002	2.46	0.00002	2.83	0.00002	similar to unknown protein [Arabidopsis thaliana] (TAIRAT1G35220.1); similar to unknown [Populus trichocarpa] (GB:AKB93988.1); contains InterPro <
255538_at	AT2G20900	2.89	3.25	0.00002	2.30	0.00002	3.03	0.00002	MYB85 (myb domain 55); DNA binding / transcription factor
255763_at	AT1G16730	2.89	4.29	0.000068	1.87	0.001468	2.83	0.00241	similar to [Populus tremula]; Picea sitchensis (GB:AKB2120.1)
257137_at	AT3G28860	2.89	2.64	0.00002	2.64	0.00002	3.25	0.00002	alpha-1,3-glucosidase
258386_at	AT2G14230	2.89	2.64	0.00002	2.46	0.00002	3.25	0.00002	UDP-glucuronosyl UDP-glucosyl transferase family protein
259377_at	AT1G64400	2.89	2.30	0.000005	2.14	0.00002	3.25	0.00002	long-chain-fatty-acid-CoA ligase, putative / long-chain acyl-CoA synthetase, putative
260546_at	AT2G43520	2.76	2.83	0.000046	2.30	0.00002	3.25	0.00002	similar to unknown protein [Arabidopsis thaliana] (TAIRAT1G03300.1); similar to unnamed protein product [Vitis vinifera] (GB:CA062788.1); contains I
261570_at	AT1G01120	2.76	2.83	0.00002	2.46	0.00002	3.25	0.00002	KCS1 (1-KETOACYL-COA TRYPSIN INHIBITOR PROTEIN 2); trypsin inhibitor
262184_at	AT1G78070	2.76	2.46	0.00002	3.48	0.00002	2.46	0.00002	protease inhibitor/seed storage protein
262703_at	AT1G16510	2.76	3.03	0.000023	2.83	0.000023	2.46	0.000038	auxin-responsive family protein
262876_at	AT1G78100	2.76	3.25	0.00002	2.14	0.000002	3.03	0.00002	similar to unknown protein [Arabidopsis thaliana] (TAIRAT1G23301.1); similar to Os05g040830 [Oryza sativa (japonica cultivar-group)] (GB:NP_001010
263157_at	AT1G16300	2.76	2.90	0.00249	3.48	0.001336	2.46	0.004438	ALDH1B4 (ALDEHYDE DEHYDROGENASE 1B4); 3-hydroxy aldehyde dehydrogenase
266583_at	AT2G46260	2.76	3.03	0.00002	2.00	0.00002	3.48	0.00002	similar to unnamed protein product [Vitis vinifera] (GB:CA056973.1); contains InterPro domain MgI_1/PabD/DUF1795, alpha/beta sandwich (InterPro:IPR001279)
266606_at	AT2G43100	2.76	2.46	0.000023	2.83	0.00002	3.03	0.00002	CRF5 (CYTOKININ RESPONSE FACTOR 5); DNA binding / transcription factor
267639_at	AT2G42200	2.76	3.48	0.00003	2.30	0.00003	2.64	0.000013	squamosa promoter-binding protein-like 9 (SPL9)
248236_at	AT5G053870	2.76	2.14	0.001077	4.29	0.001077	2.14	0.003446	plastocyanin-like domain-containing protein
249825_at	AT5G23390	2.76	2.83	0.00002	2.30	0.00002	3.03	0.00002	similar to unknown protein [Arabidopsis thalian

252153_at	AT3G51360	2.58	3.73	0.00013	2.14	0.000101	2.14	0.001077	aspartyl protease family protein
252956_at	AT4G38580	2.58	3.48	0.00002	2.30	0.00002	2.14	0.00002	ATTP6 (FARNESYLATED PROTEIN 6); metal ion binding
253182_at	AT4G35190	2.58	2.46	0.00035	1.87	0.003355	3.73	0.00088	similar to unknown protein [Arabidopsis thaliana] (TAIR AT2G37210.1); similar to unnamed protein product [Vitis vinifera] (GB:CA047480.1); contains I
257066_at	AT3G18280	2.58	3.25	0.00002	2.64	0.00002	2.00	0.00003	protease inhibitor/seed storage/lipid transfer protein (LTP) family protein
257202_at	AT3G23750	2.58	2.46	0.00002	2.46	0.00002	2.83	0.00002	leucine-rich repeat family protein / protein kinase family protein
258537_at	AT3G14350	2.58	3.48	0.00002	2.46	0.000068	2.00	0.00002	SRR7 (STRUDELIG-RECEPTOR FAMILY 7); ATP binding / protein serine/threonine kinase
258821_at	AT3G10500	2.58	2.30	0.00002	2.00	0.00002	3.73	0.00002	ANAC053 (Arabidopsis NAC domain containing protein 53); transcription factor
259967_at	AT1G76510	2.58	2.64	0.00002	2.30	0.000035	2.83	0.00002	ARD/BRIGHT DNA-binding domain-containing protein
260432_at	AT1G68150	2.58	2.83	0.000023	2.00	0.00002	3.03	0.00002	WRKY9 (WRKY DNA-binding protein 9); transcription factor
280939_at	AT1G51800	2.58	2.46	0.00013	2.83	0.00003	2.46	0.000046	zinc finger (C3H4-type RING finger) family protein
280974_at	AT1G53440	2.58	2.64	0.000023	2.30	0.00002	2.83	0.00004	leucine-rich repeat family protein / protein kinase family protein
284028_at	AT2G21060	2.58	3.03	0.00002	2.14	0.00002	2.64	0.00003	ATGRPB2 (GLYCINE-RICH PROTEIN 2B); nucleic acid binding
285284_at	AT2G20230	2.58	2.64	0.00002	2.46	0.00002	2.64	0.00003	similar to unknown protein [Arabidopsis thaliana] (TAIR AT4G28770.1); similar to unknown [Populus trichocarpa] (GB:ABK93408.1); similar to unknown
266117_at	AT2G02170	2.58	2.46	0.000035	2.46	0.00002	2.83	0.00004	remorin family protein
266167_at	AT2G38860	2.58	3.03	0.00002	1.82	0.00002	3.48	0.000003	YLS6 (yellowleaf-specific gene 5)
266239_at	AT3G01240	2.58	2.46	0.00003	1.97	0.00007	3.46	0.00003	transporter-related
266974_at	AT5G24110	2.58	1.74	0.00549	1.87	0.00007	4.09	0.00002	WRYX2 (WRKY DNA-binding protein 30); transcription factor
269984_at	AT5G16990	2.58	2.46	0.00002	2.46	0.00002	2.64	0.00002	helix-loop-helix protein
271009_at	AT5G02040	2.58	2.23	0.00008	2.46	0.00016	2.30	0.0000273	similar to unknown protein [Arabidopsis thaliana] (TAIR AT3G06300.1); similar to hypothetical protein [Vitis vinifera] (GB:CAN66779.1)
271826_at	AT3G56110	2.58	3.03	0.000101	2.14	0.00003	2.46	0.000046	ABC transporter family protein
273632_at	AT4G03400	2.58	2.30	0.000492	3.03	0.00003	2.30	0.000085	TET8 (TETRASPARIN)
273889_at	AT4G28130	2.58	2.83	0.00002	2.14	0.00002	2.64	0.00002	similar to unknown protein [Arabidopsis thaliana] (TAIR AT4G56980.1); similar to hypothetical protein [Vitis vinifera] (GB:CAN72576.1)
275698_at	AT3G30100	2.58	2.83	0.00002	2.46	0.00002	2.30	0.00002	BRIK0X/YCB542 (BRAIN-SMOTROID-6-OXIDASE 2); monooxygenase/oxygen binding
275684_at	AT3G12040	2.58	2.46	0.000035	2.30	0.000037	2.83	0.000052	ATR1 (ATRIMAC3 (Arabidopsis NAC domain containing protein 100); transcription factor
275842_at	AT3G17350	2.58	3.25	0.00002	2.30	0.000023	2.14	0.000273	similar to unknown protein [Arabidopsis thaliana] (TAIR AT5G5290.1); similar to unnamed protein product [Vitis vinifera] (GB:CA070913.1); contains I
280395_at	AT1G69780	2.58	2.64	0.00002	3.03	0.00002	2.00	0.00003	ATH10 (DNA binding / transcription factor
280800_at	AT1G78240	2.58	2.46	0.00008	2.14	0.00002	3.03	0.000003	TSD2 (TUMOROUS SHOOT DEVELOPMENT 2); methyltransferase
280840_at	AT1G29050	2.58	3.03	0.00002	2.14	0.00002	2.46	0.000101	similar to unknown protein [Arabidopsis thaliana] (TAIR AT2G34070.1); similar to unnamed protein product [Vitis vinifera] (GB:CA048076.1); contains I
281425_at	AT1G18880	2.58	3.03	0.00002	2.00	0.00002	2.64	0.00002	proton-dependent oligopeptide transporter (POT) family protein
284692_at	AT1G70000	2.58	3.25	0.00002	2.14	0.000023	2.30	0.000018	DNA-binding family protein
284898_at	AT2G32300	2.58	3.03	0.00002	2.64	0.00002	2.00	0.000078	invertase/pectin methylesterase inhibitor family protein
284751_at	AT5G14300	2.46	2.14	0.00002	2.64	0.000023	2.64	0.000052	XPO1B (exportin 1B); protein transporter
285049_at	AT1G24040	2.46	2.41	0.00002	1.74	0.00002	3.25	0.00002	peptidase/methylesterase/lyase/putative
285984_at	AT2D17960	2.46	2.30	0.00008	2.00	0.00002	2.83	0.00002	EDT (evolutionarily conserved C-terminal region 8)
286001_at	AT1G67800	2.46	2.23	0.00002	2.14	0.000027	2.46	0.00002	similar to catalytic [Arabidopsis thaliana] (TAIR AT1G24550.1); similar to unknown [Picea sitchensis] (GB:ABK28930.1); contains InterPro domain Acid
286220_at	AT1G14650	2.46	2.64	0.000018	1.87	0.001468	3.03	0.000273	ATH13 (ATH13 (Arabidopsis thaliana basic leucine zipper 14); DNA binding / transcription factor)
286940_at	AT2G43590	2.46	2.83	0.00002	1.87	0.000214	2.83	0.000035	RWD-RR domain-containing protein
286114_at	IGT5590.AT1G1751	2.46	3.73	0.00002	1.87	0.000009	2.14	0.000023	IWT2 (IWT2 (Arabidopsis thaliana basic leucine zipper 44); DNA binding / protein heterodimerization / transcription factor)[A]
283419_at	AT2G17220	2.46	2.46	0.00002	2.00	0.00002	3.03	0.00002	protein kinase, putative
283775_at	AT2G24640	2.46	2.83	0.00002	3.03	0.000023	1.74	0.00002	OTU-like cysteine protease family protein
287602_at	AT2G32920	2.46	2.14	0.00002	2.64	0.00002	2.00	0.000078	ATP-binding / protein kinase
287644_at	AT3G25780	2.46	2.64	0.00002	1.82	0.004073	1.87	0.000101	ANAC100 (ATNAC3 (Arabidopsis NAC domain containing protein 100); transcription factor)
287628_at	AT5G64040	2.46	2.14	0.00002	2.64	0.00002	2.64	0.000052	unknown protein
289126_at	AT1G64330	2.46	2.64	0.000013	1.74	0.000438	3.25	0.000103	TOPBP6 (Type one serine/threonine phosphatase 6); protein serine/threonine phosphatase
291010_at	AT5G02550	2.46	3.25	0.00002	2.14	0.00002	2.14	0.000003	unknown protein
254445_at	AT2G20930	2.46	2.83	0.00002	3.03	0.00002	1.74	0.000023	3-hydroxybutyrate dehydrogenase, putative
256818_at	AT2G31420	2.46	4.29	0.00003	1.52	0.000008	2.30	0.000078	oxidoreductase, 2OG-Fe(II) oxygenase family protein
256855_at	AT3G02070	2.46	2.30	0.00002	2.14	0.000002	3.03	0.00002	OTU-like cysteine protease (OTU) family protein
256888_at	AT3G03110	2.46	2.14	0.00002	2.64	0.000023	2.64	0.000052	XPO1B (exportin 1B); protein transporter
257049_at	AT1G24040	2.46	2.41	0.00002	1.74	0.00002	3.25	0.00002	peptidase/methylesterase/lyase/putative
258964_at	AT5G18290	2.46	2.30	0.00008	2.00	0.00002	2.83	0.00002	EDT (evolutionarily conserved C-terminal region 8)
260001_at	AT1G67800	2.46	2.23	0.00002	2.14	0.000027	2.46	0.00002	similar to catalytic [Arabidopsis thaliana] (TAIR AT1G24550.1); similar to unknown [Picea sitchensis] (GB:ABK28930.1); contains InterPro domain Acid
260220_at	AT1G14650	2.46	2.64	0.000018	1.87	0.001468	3.03	0.000273	ATH13 (ATH13 (Arabidopsis thaliana basic leucine zipper 14); DNA binding / transcription factor)
260840_at	AT2G43590	2.46	2.83	0.00002	1.87	0.000214	2.83	0.000035	RWD-RR domain-containing protein
261114_at	IGT5590.AT1G1751	2.46	3.73	0.00002	1.87	0.000009	2.14	0.000023	IWT2 (IWT2 (Arabidopsis thaliana basic leucine zipper 44); DNA binding / transcription factor)[A]
263149_at	AT2G17220	2.46	2.46	0.00002	2.00	0.00002	3.03	0.00002	protein kinase, putative
263775_at	AT2D17960	2.46	2.30	0.00007	2.64	0.00002	3.73	0.00002	similar to unknown protein product [Vitis vinifera] (GB:CA040177.1); contains I
265900_at	AT3G24670	2.46	2.46	0.00002	2.30	0.00002	2.46	0.00002	similar to unknown protein [Arabidopsis thaliana] (TAIR AT4G339190.1); similar to hypothetical protein [Vitis vinifera] (GB:CAN77202.1)
258818_at	AT3G04580	2.46	2.46	0.00002	1.74	0.00002	3.25	0.00002	ATP7 (ATP7 (purple acid phosphatase 7); acid phosphatase/ protein serine/threonine phosphatase
259333_at	AT1G12500	2.46	2.64	0.00002	2.30	0.00003	2.64	0.00002	similar to unknown protein [Arabidopsis thaliana] (TAIR AT3G05975.1); similar to Harpin-induced [Medicago truncatula] (GB:ABE93043.1); contains I
260255_at	AT1G74330	2.46	2.14	0.00002	2.00	0.0000167	3.03	0.00002	ERD3 (EARLY-RESPONSIVE TO DEHYDRATION 3)
260264_at	AT1G24040	2.46	2.14	0.000023	2.83	0.00002	2.30	0.00002	SCPL20 (serine carboxypeptidase-like 20); serine carboxypeptidase
260710_at	AT1G67800	2.46	2.14	0.00002	1.74	0.00002	3.25	0.00002	HEM1 (glutamyl-tRNA reductase)
260741_at	AT1G67840	2.46	2.30	0.00002	2.64	0.00002	2.30	0.00002	EIN3 (ETHYLENE INSENSITIVE 4); receptor
263387_at	AT2G21940	2.46	2.83	0.00003	2.00	0.00002	2.30	0.000023	similar to unknown protein [Arabidopsis thaliana] (TAIR AT1G16210.1); similar to Od3g0228500 [Oryza sativa (japonica cultivar-group)] (GB:NP_001049001)
266541_at	AT2G35110	2.46	3.03	0.00002	2.14	0.0000101	2.00	0.00002	ERD3 (EARLY-RESPONSIVE TO DEHYDRATION 3); oxidoreductase, acting on paired donors, with incorporation or reduction of molecular oxygen, 2'-oxo-
268074_at	AT5G05570	2.35	2.46	0.00002	1.87	0.000046	4.00	0.00002	ATP binding / protein binding / shikimate kinase/zinc ion binding
268084_at	AT1G24040	2.46	2.14	0.00002	1.82	0.000092	3.25	0.00002	tryptophan synthase-related
268545_at	AT2D15900	2.46	2.23	0.00002	2.83	0.00002	1.74	0.000052	ATP7 (ATP7 (purple acid phosphatase 7); acid phosphatase/ protein serine/threonine phosphatase
268944_at	AT2D18800	2.46	2.83	0.00002	2.46	0.00002	2.00	0.00002	similar to unknown protein [Arabidopsis thaliana] (TAIR AT4G339190.1); similar to hypothetical protein [Vitis vinifera] (GB:CAN77202.1)
268994_at	AT2D28460	2.46	2.00	0.00003	1.74	0.00002	2.64	0.00002	ATP7 (ATP7 (purple acid phosphatase 7); acid phosphatase/ protein serine/threonine phosphatase)
269060_at	AT2D29770	2.46	2.23	0.00002	1.87	0.00002	3.03	0.00002	SCPL20 (serine carboxypeptidase-like 20); serine carboxypeptidase
269080_at	AT1G01570	2.46	2.49	0.00002	1.87	0.00002	2.00	0.00002	CYT1 (CYTOCHROME DEFECTIVE 1); nucleotidyltransferase
269222_at	AT3G48480	2.46	3.03	0.00002	1.74	0.00003	2.30	0.00002	ATRAG1 (ARABIDOPSIS THALIANA PEPTIDE-N-GLYCANASE 1); catalytic / peptide-N-acetyl-beta-glucosaminidase
269225_at	AT3G48480	2.46	2.83	0.00002	2.00	0.00002	2.64	0.00002	ATRAG1 (ARABIDOPSIS THALIANA PEPTIDE-N-GLYCANASE 1); catalytic / peptide-N-acetyl-beta-glucosaminidase
269227_at	AT3G48480	2.46	2.30	0.00002	2.00	0.00002	2.64	0.00002	ATRAG1 (ARABIDOPSIS THALIANA PEPTIDE-N-GLYCANASE 1); catalytic / peptide-N-acetyl-beta-glucosaminidase
269229_at	AT2D28460	2.46	2.30	0.00002	1.87	0.00002	3.03	0.00002	ATRAG1 (ARABIDOPSIS THALIANA PEPTIDE-N-GLYCANASE 1); catalytic / peptide-N-acetyl-beta-glucosaminidase
269359_at	AT1G15700	2.46	2.83	0.00002	1.87	0.000018	2.30	0.00002	similar to unknown protein [Arabidopsis thaliana] (TAIR AT1G14890.1); similar to unnamed protein product [Vitis vinifera] (GB:CA061461.1); contains I
269743_at	AT2G37390	2.46	2.00	0.000023	2.46	0.000035	2.46	0.00002	ATRAG1 (ARABIDOPSIS THALIANA BCL-ASSOCIATED ANTHOGENE 7); calmodulin binding
270704_at	AT1G15970	2.46	2.83	0.00002	1.87	0.000018	2.30	0.00002	ATRAG1 (ARABIDOPSIS THALIANA BCL-ASSOCIATED ANTHOGENE 7); calmodulin binding
270707_at	AT2G24740	2.46	2.30	0.00002	2.30	0.00002	2.30	0.0000389	ATRAG1 (ARABIDOPSIS THALIANA BCL-ASSOCIATED ANTHOGENE 7); calmodulin binding
270810_at	AT2G03165	2.46	2.30	0.00002	2.00	0.000035	2.14	0.00002	short-chain dehydrogenase/reductase (SDR) family protein
270909_at	AT1G01570	2.46	2.49	0.000018	1.87	0.000018	2.35	0.0000355	ATRAG1 (ARABIDOPSIS THALIANA BCL-ASSOCI

245141_at	AT2G45400	2.19	2.46	0.000035	2.00	0.000035	2.14	0.000017	BEN1: oxidoreductase_acting on CH-OH group of donors
248200_at	AT5G54160	2.19	2.64	0.00002	1.87	0.00004	2.14	0.00002	ATOMT1 (O-METHYLTRANSFERASE I)
249013_at	AT5G44700	2.19	2.46	0.000023	2.30	0.000038	1.87	0.00249	EDA23 (embryo sac development arrest 23); ATP binding / protein serine/threonine kinase
249811_at	AT5G23780	2.19	1.87	0.000027	2.64	0.00002	2.14	0.000046	heavy-metal-associated domain-containing protein
250525_at	AT5G08550	2.19	2.64	0.00002	2.00	0.00006	2.00	0.00002	ILP1 (INCREASED LEVEL OF POLYPLOIDY1-1D); translation repressor
251197_at	AT3G29690	2.19	2.00	0.00002	1.62	0.00013	3.25	0.00002	glutaredoxin family protein
251293_at	AT3G19300	2.19	2.46	0.00003	2.00	0.000023	2.14	0.00003	unknown protein
252643_at	AT4G39330	2.19	2.30	0.000046	1.74	0.00002	2.64	0.00004	mannitol dehydrogenase, putative
253317_at	AT4G33960	2.19	2.00	0.000774	2.64	0.00002	2.00	0.000088	similar to unknown protein [Arabidopsis thaliana] (TAIRAT2G15830.1)
254680_at	AT4G18250	2.19	1.23	0.001201	1.82	0.000214	5.28	0.00002	receptor serine/threonine kinase, putative
259731_at	AT1G74760	2.19	2.00	0.00013	2.00	0.00004	2.64	0.00000	binding
259823_at	AT1G68250	2.19	2.46	0.000023	2.00	0.000052	2.14	0.000052	glycosyl hydrolase family 17 protein
259956_at	AT1G75110	2.19	4.00	0.00046	2.00	0.000046	1.32	0.000052	RRA2 (REDUCED RESIDUAL ARABINOSE 2)
262452_at	AT1G1210	2.19	1.74	0.000968	2.83	0.000147	2.14	0.000101	similar to unknown protein [Arabidopsis thaliana] (TAIRAT1G1220.1); similar to cotton fiber expressed protein 1 [Gossypium hirsutum] (GBAAC3327)
262677_at	AT2G15860	2.19	2.00	0.00002	2.00	0.00002	2.64	0.000003	similar to unknown protein [Arabidopsis thaliana] (TAIRAT1G20100.1)
267524_at	AT4G1200	2.19	2.14	0.000076	1.97	0.0002	2.64	0.00002	transferrase family protein
268023_at	AT5G13460	2.19	2.64	0.00002	2.30	0.00002	1.74	0.00003	ATM11 (Q-domain 11); calmodulin binding
251937_at	3C0309ATGS3	2.19	2.64	0.00002	1.62	0.00003	2.46	0.00002	[AT4G20000] similar to [JOF47] (Conserved peptide upstream open reading frame 47) [Arabidopsis thaliana] (TAIRATSG03190.1); similar to hypoth
247333_at	AT5G03690	2.14	2.14	0.00002	2.14	0.00002	2.14	0.00002	flavonoid synthase, putative
247377_at	AT5G03180	2.14	2.46	0.00002	1.87	0.00002	2.14	0.000052	peptidase lyase family protein
247489_at	AT5G01830	2.14	2.14	0.00002	1.74	0.00002	2.64	0.00002	short-chain dehydrogenase/reductase (SDR) family protein
248554_at	AT5G03033	2.14	2.46	0.000088	2.14	0.000189	1.87	0.000885	ATP binding / protein kinase
249983_at	AT5G03570	2.14	2.30	0.00013	2.14	0.00002	2.00	0.00000	AHK2 (ARABIDOPSIS HISTIDINE KINASE 2)
249784_at	AT5G02420	2.14	2.46	0.000241	2.30	0.000346	1.74	0.01077	ATP binding
248817_at	AT5G23820	2.14	2.30	0.00002	2.64	0.00002	1.82	0.000692	MD-2-related lipid recognition domain-containing protein / ML domain-containing protein
250149_at	AT5G14700	2.14	2.83	0.00002	1.52	0.000101	2.30	0.00023	cinnamoyl-CoA reductase-related
253219_at	AT4G34990	2.14	2.46	0.00002	1.52	0.000189	2.64	0.000023	AMYB32 (myb domain protein 32); DNA binding / transcription factor
251467_at	AT4G24400	2.14	2.46	0.00002	1.74	0.00002	2.30	0.00000	CIPK8 (CBL-INTERACTING PROTEIN KINASE 8); kinase
254524_at	AT4G22640	2.14	1.87	0.00004	2.30	0.000027	2.30	0.000052	similar to unknown protein [Arabidopsis thaliana] (TAIRAT4G22666.1); similar to unknown protein [Arabidopsis thaliana] (TAIRAT4G22666.1); similar to hypothetical protein [Arabidopsis suecica] (GBBAF63139.1); contains
255602_at	AT4G01020	2.14	2.30	0.00002	1.87	0.00002	2.30	0.00000	similar to unknown protein [Arabidopsis thaliana] (TAIRAT01020.1); similar to hypothetical protein [Arabidopsis thaliana] (TAIRAT01020.1); similar to hypothetical protein [Arabidopsis suecica] (GBBAF63139.1); contains
257022_at	AT3G19580	2.14	1.62	0.005409	1.74	0.000214	3.48	0.00000	AF2Z (ARABIDOPSIS ZINC-FINGER PROTEIN 2); nucleic acid binding / transcription factor/ zinc ion binding
257140_at	AT3G28910	2.14	1.87	0.00006	1.87	0.00002	2.83	0.00000	MY830 (myb domain protein 30); DNA binding / transcription factor
257228_at	AT3G27880	2.14	2.14	0.00002	1.87	0.00002	2.46	0.00002	similar to unknown protein [Arabidopsis thaliana] (TAIRAT1G23101.1); similar to hypothetical protein [Vitis vinifera] (GB-CAN81685.1); similar to unna
257505_at	AT3G24210	2.14	2.30	0.00002	1.74	0.00002	2.46	0.00002	myb domain transcription factor
257573_at	AT2G33990	2.14	2.14	0.00002	2.14	0.00000	2.14	0.00000	IDQD (Q-domain 9); calmodulin binding
257888_at	AT3G25070	2.14	2.14	0.00002	1.87	0.00002	2.46	0.00000	RN1 (RPM1) INTERACTING PROTEIN 4; protein binding
259811_at	AT1G52290	2.14	2.00	0.00002	2.46	0.00002	2.00	0.00002	ATRABG3d (Arabidopsis Rar GTPase homolog G3d); GTP binding
260407_at	AT1G69910	2.14	3.03	0.000114	1.87	0.000114	1.74	0.04925	protein kinase family protein
260414_at	AT1G68950	2.14	2.46	0.00002	1.74	0.00002	2.30	0.00000	ATNR12 (INTRATE TRANSFERER 12; calcium ion binding / transporter
262171_at	AT4G12540	2.14	2.46	0.00002	1.74	0.00002	2.51	0.00000	JAZ1 (JAZ DOMAIN 1); zinc-finger domain protein
265653_at	AT3G03935	2.09	2.30	0.00002	2.14	0.00002	2.64	0.00002	similar to unknown protein [Arabidopsis thaliana] (TAIRAT4G39870.1); similar to hypothetical protein [Vitis vinifera] (GB-CAN74846.1); contains InterP
266902_at	AT2G07050	2.14	2.39	0.00002	2.00	0.00002	2.14	0.000355	ATR (ATR-INTERNSITIVE3-LIKE 1); transcription factor
266983_at	AT5G28490	2.14	1.52	0.00189	1.82	0.00346	4.00	0.00000	EIL (ETHELE-INSENSITIVE3-LIKE 1); transcription factor
267069_at	AT2G10100	2.14	2.14	0.000966	2.00	0.000241	2.30	0.000068	ATCAMPB25 (ARABIDOPSIS THALIANA CALMODULIN (CAM)-BINDING PROTEIN OF 25 KDA); calmodulin binding
245330_at	AT4G14930	2.09	2.30	0.00003	1.82	0.00002	2.46	0.00000	acid phosphatase survival protein Surf; putative
246494_at	AT5G18190	2.09	2.14	0.000101	2.00	0.000023	2.14	0.000103	ATCSLA11 (Cellulose synthase-like A11); transferase, transferring glycosyl groups
246538_at	AT5G15520	2.09	2.14	0.00002	2.00	0.00000	2.14	0.00002	40S ribosomal protein S13 (RPS13B)
246896_at	AT5G07280	2.09	2.30	0.000023	2.14	0.00002	1.87	0.00000	RLK (RECEPTOR-LIKE KINASE); ATP binding / kinase/ protein serine/threonine kinase
247474_at	AT5G59400	2.09	2.14	0.00002	1.74	0.00002	2.46	0.000035	aspartyl aminopeptidase; putative
248148_at	AT5G54430	2.09	2.00	0.000438	2.30	0.00002	2.00	0.000037	similar to hypothetical protein [Vitis vinifera] (GB-CAN64889.1)
248154_at	AT5G54400	2.09	2.64	0.000114	1.74	0.001468	2.00	0.00000	AT hook motif-containing protein
248893_at	AT5G48330	2.09	2.46	0.00002	2.00	0.000023	1.87	0.00000	methylester transferase
249777_at	AT2G24210	2.09	1.74	0.00002	1.52	0.00002	3.48	0.00000	regulator of chromosomal condensation (RCC1) family protein
250735_at	AT2G06280	2.09	2.46	0.000966	1.74	0.000027	2.14	0.000035	lipase class 3 family protein
253225_at	AT4G35050	2.09	2.00	0.000008	2.00	0.000002	2.30	0.00000	similar to hypothetical protein [Vitis vinifera] (GB-CAN67410.1)
253603_at	AT4G30935	2.09	2.30	0.000241	2.14	0.000002	1.87	0.000023	WRK2 (WRKY-DNA-binding protein 32); transcription factor
253780_at	AT2G28480	2.09	2.14	0.000078	1.87	0.00002	2.30	0.00000	protein phosphatases 2C; putative / PP2C; putative
254383_at	AT4G22010	2.09	2.14	0.000101	2.30	0.00002	1.87	0.00000	SKS4 (SKUS Similar 4); copper ion binding / oxidoreductase
254572_at	AT2G16240	2.09	2.14	0.00002	2.00	0.00002	2.14	0.00000	ethylene-responsive nuclear protein / ethylene-regulated nuclear protein (ERT2)
254543_at	AT4G20880	2.09	1.74	0.000008	2.00	0.000035	2.30	0.00000	ARAC3 (ATROPH/RO/ROPI/ROPE (rho-related protein from plants 6); GTP binding / GTpase
255225_at	AT4G35060	2.09	2.30	0.000008	1.87	0.000002	2.51	0.00000	WRL2 (WRL-LIKE 2); finger protein
255640_at	AT4G12540	2.09	2.46	0.000004	2.00	0.000007	1.87	0.000014	Dorf1 (Dorf1-like protein); finger protein
255980_at	AT4G03050	2.09	1.87	0.000003	1.62	0.000002	3.03	0.00000	CYTB (CYTOCHROME B); oxygen binding
256150_at	AT1G00165	2.09	2.39	0.000002	2.00	0.000005	2.00	0.00000	PDI1 (PDI-BETA (PDI-BETA DEHYDROGENASE E1 BETA)); pyruvate dehydrogenase (acetyltransfer)
257114_at	AT3G05990	2.09	1.87	0.000003	2.14	0.000002	2.30	0.000147	MYB1 (MYB family protein); kinase
258702_at	AT3G09130	2.09	2.64	0.000147	1.74	0.000438	2.00	0.00000	similar to unnamed protein product [Vitis vinifera] (GB-CAO18124.1)
259668_at	AT2G02490	2.09	2.14	0.000147	1.74	0.004073	2.46	0.000273	AMP-dependent synthetase and lipase family protein
259707_at	AT1G52310	2.09	2.46	0.000002	1.87	0.000002	2.00	0.00000	protein kinase family protein / C-type lectin domain-containing protein
259736_at	AT1G64390	2.09	2.83	0.000002	1.41	0.000023	2.30	0.00000	dynein light chain type I family protein
261312_at	AT1G57970	2.09	2.14	0.000046	1.74	0.000002	2.46	0.000027	KAS III (3'-O-ACYL-ACYL CARRIER PROTEIN SYNTHASE III); 3'-oxoacyl-[acyl-carrier-protein] synthase
261498_at	AT1G28440	2.09	2.30	0.000002	1.87	0.000002	2.14	0.000002	PGP6 (ATPase, coupled to transmembrane movement of substances)
261552_at	AT1G53430	2.09	2.64	0.000002	1.87	0.000002	1.82	0.00000	HSL (HAESA-LIKE 1); ATP binding / kinase/ protein kinase
261575_at	AT1G16590	2.09	2.00	0.000001	1.87	0.000002	1.82	0.00000	leucine-rich repeat transmembrane protein kinase, putative
262609_at	AT4G38670	2.09	2.00	0.001832	1.82	0.000046	2.64	0.00000	WNK1 (WITH NO LYSINE (K)); kinase
254788_at	AT4G12790	2.09	1.87	0.000014	2.00	0.000002	2.30	0.00000	similar to unknown protein [Arabidopsis thaliana] (TAIRAT3G4200.1); similar to condensation domain-containing protein [Arabidopsis thaliana] (TAIRAT3G4200.1)
255430_at	AT4G03332	2.09	2.00	0.000013	1.82	0.000002	2.64	0.00000	ATR (ATR-1084040); similar to Avr9/Cf-9 rapidly elicited protein 194 [Neotoma brasiliensis] (GB-AAG74849.1)
260301_at	AT1G02020	2.09	2.00	0.000002	1.74	0.000006	2.46	0.00000	similar to unnamed protein product [Arabidopsis thaliana] (TAIRAT4G54800.1); similar to unnamed protein product [Vitis vinifera] (GB-CAO07944.1)
261187_at	AT1G32860	2.09	1.52	0.001201	2.00	0.000023	2.83	0.00000	MEK1 (mitogen-activated protein kinase kinase 1); MAP kinase/ kinase
256321_at	AT1G55020	2.09	2.14	0.000002	1.74	0.000002	2.30	0.00000	ATR1 (ATR-1084040); kinase
256881_at	AT3G13380	2.09	1.87	0.000101	1.82	0.001651	2.83	0.00000	LXLX1 (Lipopxygenase 1); proteolipid protein
257895_at	AT3G16950	2.09	2.30	0.000002	1.74	0.000002	2.14	0.00000	LPLD (LIPOMIDE DEHYDROGENASE 1)
259808_at	AT3G04910	2.09	1.87	0.000002	1.87	0.000002	1.82	0.00000	WNK2 (WNK-LIKE 2); transcription factor
259195_at	AT3G01730	2.09	2.46	0.000002	2.14	0.000023	1.82	0.003355	unknown protein
259747_at	AT1G11710	2.09	2.46	0.000002	1.74	0.001468	2.00	0.00000	6-phosphogluconate dehydrogenase NAD-binding domain-containing protein
260301_at	AT1G02020	2.09	2.00	0.000002	1.74	0.000006	2.46	0.00000	glycosyltransferase family protein 47
261187_at	AT1G32860	2.09	1.52	0.00					

**Supplemental Table S2.** Trichome and Trichome Branch Numbers of Transgenic Plants Harboring *GL2* Promoter-driven bHLH-GFP Genes.

	WT	<i>GL2pro-RHD6-GFP</i>	<i>GL2pro-LRL1-GFP</i>	<i>GL2pro-LRL1-GFP</i> × <i>GL2pro-RHD6-GFP</i>
Trichome number	243±51	224±33	230±53	131±39
1 branch (%)	0.5	0.9	0.9	0.7
2 branches (%)	3.7	5.0	4.7	7.4
3 branches (%)	94.5	91.4	92.2	81.7
4 branches (%)	1.3	2.7	2.2	9.9
5 branches (%)	0	0	0	0.3

The 10th–12th leaves of the wild type, homozygous transgenic lines (*GL2pro-RHD6-GFP* and *GL2pro-LRL1-GFP*), and the F1 progeny of the transgenic line (*GL2pro-RHD6-GFP* × *GL2pro-LRL1-GFP*) with a moderate trichome phenotype were observed. Numbers of trichomes on a leaf (mean ± s.d.,  $n = 20$ ) and ratios (%) of trichomes with each number of branches ( $n > 1,000$ ) are presented.

**Supplemental Table S3.** List of Primers Used in This Study.

Primer name	Sequence	Annotation
TUB2-real-F	GTTCTCGATGTTGTCGTAAG	for qRT-PCR
TUB2-real-R	TGTAAAGGCTCAACCACAGTAT	
PLDζ1-real-F	CTTCTCTGTGTGCCAATG	
PLDζ1-real-R	CTGGTGCTATTCCCAAATCG	
LRL1-real-F	GTGCTGCTTCCGTTCTTCT	
LRL1-real-R	GAGACAAAGACCTTCCCTTGA	
LRL2-real-F	CTGCTTCTGCTTCTTCTCAAATCTCTG	
LRL2-real-R	GTGGAGATGGTGGTGGCTAACGAG	
LRL3-real-F	TGTTGGACGAGATCATCGAG	
LRL3-real-R	TCCTGTAGCGTTCCATTCC	
bHLH7-real-F	GCTGTCGCACCACTAGTCACTGAAA	
bHLH7-real-R	CTGGTGGCTGAGAATGGTAAATCGC	
bHLH59-real-F	GGTGC GGTTGCTCCACTTGTACTG	
bHLH59-real-R	TTTGATTGAAGAAGCTGCATCGCG	
RHD6-real-F	TGATTGGTGACAATGCTTGA	
RHD6-real-R	GGAGAGAATGGCATCAATGG	
RSL1-real-F	TGAGAAAGCAATTGGCTATGTAAAG	
RSL1-real-R	CTCGTTGTATGATGAGAGGATTGC	
RSL2-real-F	AAAACAAGAGGCCAGTCGTGGTGCAG	
RSL2-real-R	AAGCAATCGGCGCATACATCCATAG	
RSL4-real-F	GAAGAGAGAAGATTAACGAAAGGC	
RSL4-real-R	CAGGCCGTTGTAAGCCAATGGTGC	
bHLH84-real-F	GTTGATATTAGCACGATGTTGGAAG	

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bHLH84-real-R	TCTGGTCAGTGCATTGAGTTTAGG	
ACT7-ChIP-F	CAGTCACGAGAAAAAAACCACAGTC	for ChIP
ACT7-ChIP-R	GGACATCGTCAAATTTATTCTCG	
PLDz1-ChIP-F	CTACATAGTATAAGATCACTGATTG	
PLDz1-ChIP-R	CGACTTGACCTCTCTCC	
LRL1-ChIP-F1	CAACAACAAAACAAATCATTAAACTACATGAAAAC	
LRL1-ChIP-R1	GTGCTAAGTGTAAATAGCTAGCTTTG	
LRL1-ChIP-F2	GTTCATGTTAGCAATTAAATGGAAAAGAGG	
LRL1-ChIP-R2	GTCCGGATGTTGACACTTCTTC	
LRL1-ChIP-NF	TCATTGGTAACACTTAGGTGGTCC	
LRL1-ChIP-NR	AAGGAGAATGATGAAACCAAACGAC	
LRL2-ChIP-F1	GCTTCATGTTCTCAAGTAGAG	
LRL2-ChIP-R1	GTCTGGTTCTTACTCTATTAGTC	
bHLH82-ChIP-NF	CAAAAACAATTATAACAAAGAGGCCG	
bHLH82-ChIP-NR	TACTGGCCGTTTCATTGTTCTTC	
RHD6-ChIP-F1	ATTTATTCACAATAATGTTGGCG	
RHD6-ChIP-R1	TGCTTCAAATAAACATTACACC	
RSL1-ChIP-F1	TTGATCTCATGCCAGCTCCTCTC	
RSL1-ChIP-R1	TATCATAAAGGTTATATAGGCGG	
RSL1-ChIP-F2	TAGATTGAATGTCATGCAACTTGGG	
RSL1-ChIP-R2	AAATACCACATTACTGGTCGTT	
RSL2-ChIP-F1	TATCTAATGGTATCCCAGACTTG	
RSL2-ChIP-R1	ATAGTGGATAAATAATGTCAAC	
RSL2-ChIP-F2	TGTTCTTAGTTCGTAAATTAGATGG	

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RSL2-ChIP-R2	TCCCCATCTATTTGTGATTGAAG	
RSL2-ChIP-F3	CGTCACATGACGTAAATCATAGTAAG	
RSL2-ChIP-R3	CACTATCTATCTCAGTAAATGTGTATGAC	
eGFP-F	ATGGTGAGCAAGGGCGAGGAGC	for cloning*
eGFP-R	CTTGTACAGCTCGTCCATGCCG	
GL2-pF	AAGCTTTGAATTGTAGATAAAATCA	
GL2-pR	ACAAATCCTGTCCCTAGCTAGCTTCTTGCTTAAT	
RHD6-pF	TTTTTCAAATGAGTTTATTCTAGATT	
RHD6-pR	TAGACACTAATAAGTTGATAAGTGATT	
RSL1-pF	ACCAATTGGTTAACCTTATAAGTCGCAC	
RSL1-pR	TGGTACTAAAGGGTGTCTAGTGAGATG	
RSL2-pF	CCTTCTTGCCTATTTGTTCGTTC	
RSL2-pR	TTTATATGTTGTTAACGCGTC	
LRL1-pF	TCAATGAACCTATTCCATGGTACG	
LRL1-pR	GATGATGATGGGTTCTCTGCTTC	
LRL2-pF	GAGGCGGTTGGGTTAACGACCCG	
LRL2-pR	GGCTCTGTTTTTTTTGGTGGGG	
GL2-CDSF	ATGTCAATGCCGTCGACATGTCTT	
GL2-CDSR	TCAGCAATCTCGATTGTAGACTCTCTT	
RHD6-CDSF	ATGGCACTCGTTAACGACCATCCC	
RHD6-CDSR	TTAATTGGTGATCAGATTGAAATTCC	
RSL1-CDSF	ATGTCACTCATTAACGAAACATTGCAATG	
RSL1-CDSR	TTATTCTGCTATACTTGTCTCTAGTTG	
RSL2-CDSF	ATGGAAGCCATGGGAGAATGGAGC	

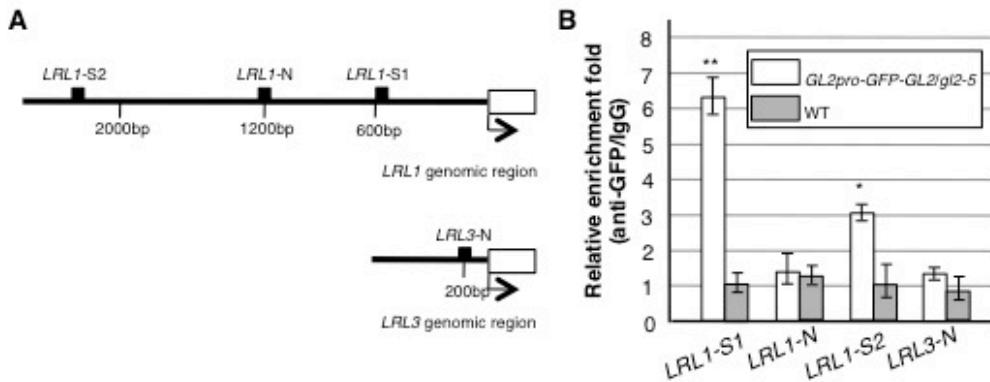
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RSL2-CDSR	TCATCTCGGTGAGCTGAGACCAATG	
LRL1-CDSF	ATGATGAACTCTTCTCTTCTAACTCCTTC	
LRL1-CDSR	TCACGCTTCGAAACGGATAACGGCCTC	
LRL1-genomicR	AGTGAAAAACCAATATACTATTTTTTC	
LRL2-CDSF	ATGAACTCCTCGTCTCTTCTAACTCC	
LRL2-CDSR	TCACGGCTTGGAAACGGAGGGAGCG	
gl2-5LB	GGATTCCTGGCAGAAGAGTA	for genotyping
gl2-5RB	GGATAGGGAGTGCCTCCAAGAG	
LBb1.3	ATTTCGCCGATTCGGAAC	
LRL1-1-LB	AGAAGACGACCTCTCGGTAC	
LRL1-1-RB	GGGGTAATTCTTTACAGAG	
LRL2-1-LB	GGACAAATGCCGTTATCACGGCTTG	
LRL2-1-RB	GGACCACAAATTGCTACTAGTTAGTAGG	
Irl1-2-TDNA-F	CAGCTACTGGTGGTACGGTGG	for checking of
Irl1-2-TDNA-R	GTCGACTGTATGGTCATGCCAG	T-DNA
Irl2-2-TDNA-F	CTCTCCCTTCCACCTCCCTC	insertion
Irl2-2-TDNA-R	GTTAGGAGACAAAGGAACGCCGG	

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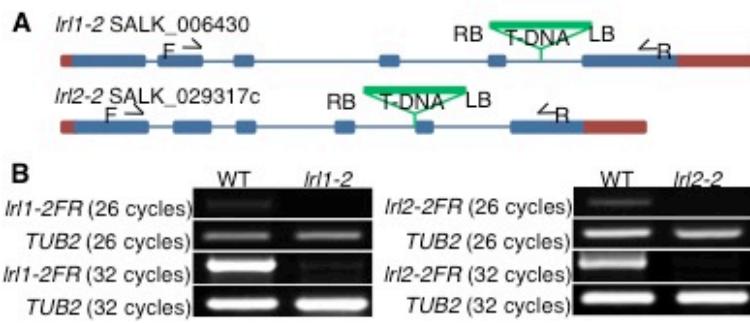
\*The recombination sites of the Gateway system were not included in these primers. Sequences of the recombination sites (see the Invitrogen Gateway™ Technology Instruction Manual) should be added when they are used in the Gateway system.



**Supplemental Figure S1.** ChIP Analysis for the GL2 Binding to the *LRL1* and *LRL3* Upstream Regions.

(A) The regions amplified in the ChIP analysis, *LRL1-S1*, *LRL1-N*, *LRL1-S2* and *LRL3-N*, are schematically illustrated. The L1 box-like sequence exists in *LRL1-S1* and *LRL1-S2*, but not in *LRL1-N* or *LRL3-N*.

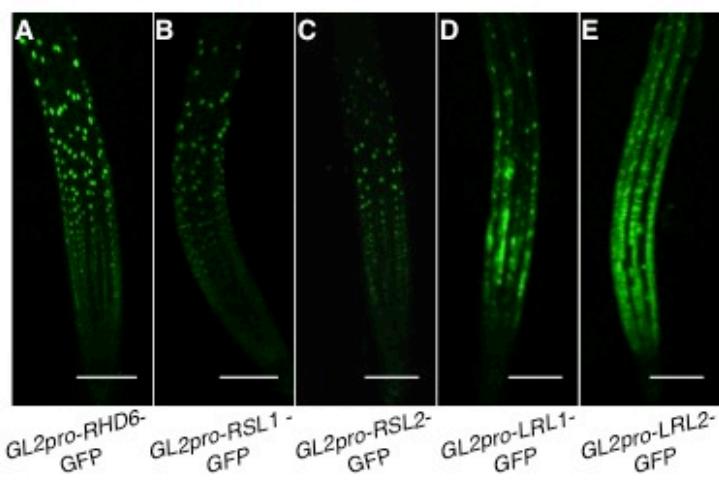
(B) Results of the ChIP analysis of the regions illustrated in (A) are shown. Relative enrichment folds (anti-GFP/IgG) in *GL2pro-GFP-GL2/gl2-5* roots and wild-type roots are shown in white and gray boxes, respectively (mean  $\pm$  s.d.,  $n = 3$ ). Asterisks indicate that the enrichment in *GL2-pro-GFP-GL2/gl2-5* is significantly different from that in the wild type (\*  $P < 0.05$ ; \*\*  $P < 0.01$ , Student's *t*-test).



**Supplemental Figure S2.** Expression Analysis of the *Irl1-2* and *Irl2-2* Mutant Genes.

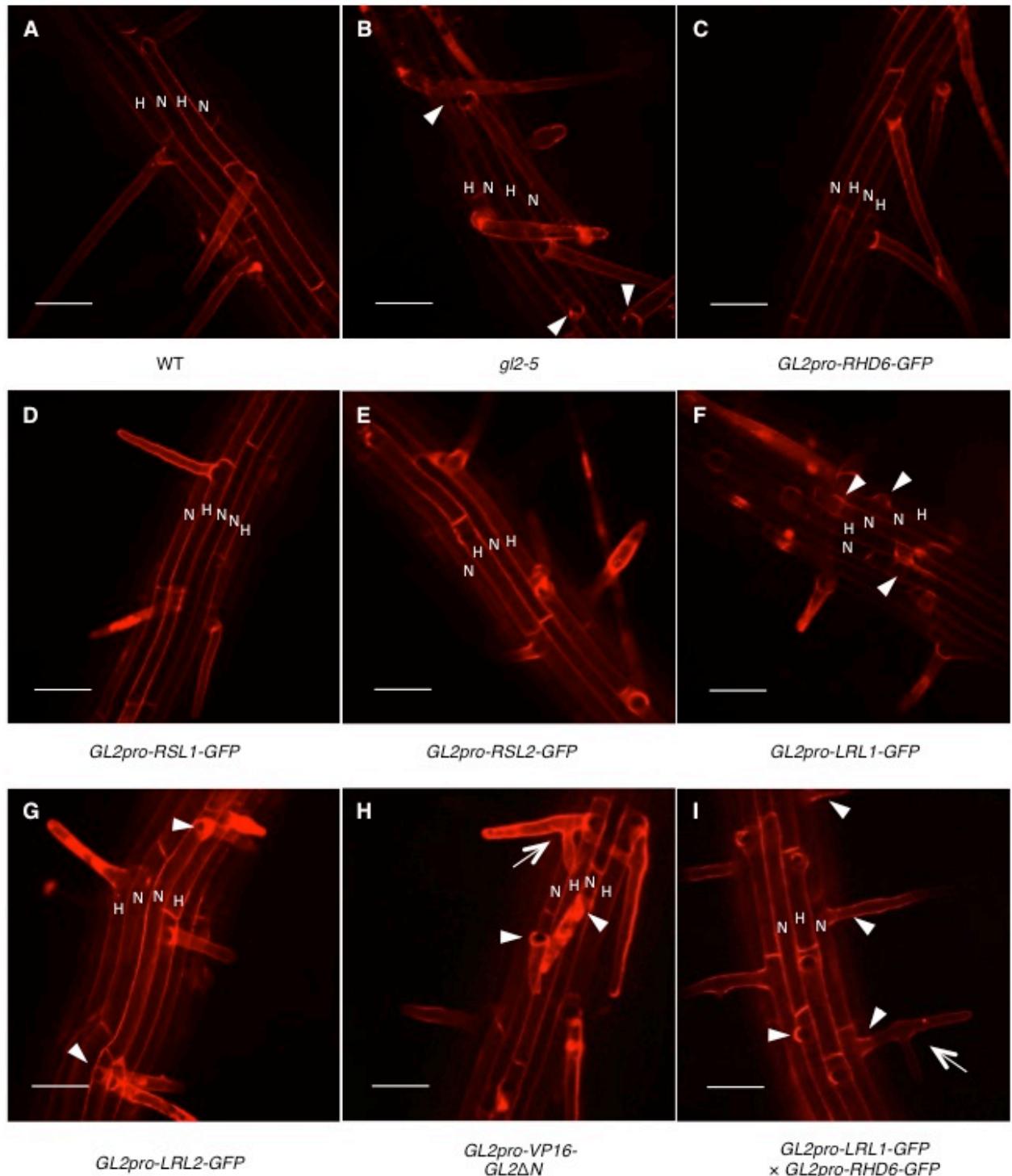
(A) The gene structures and T-DNA insertion sites of *Irl1-2* (SALK\_006430) and *Irl2-2* (SALK\_029317c) are schematically illustrated. Horizontal arrows labeled with F and R indicate the locations of the PCR primers used in (B).

(B) The results of semi-quantitative RT-PCR analysis for *LRL1* and *LRL2* transcripts in wild-type and mutant plants are shown. Transcripts of the *TUBULIN2* (*TUB2*) gene were used as reference.



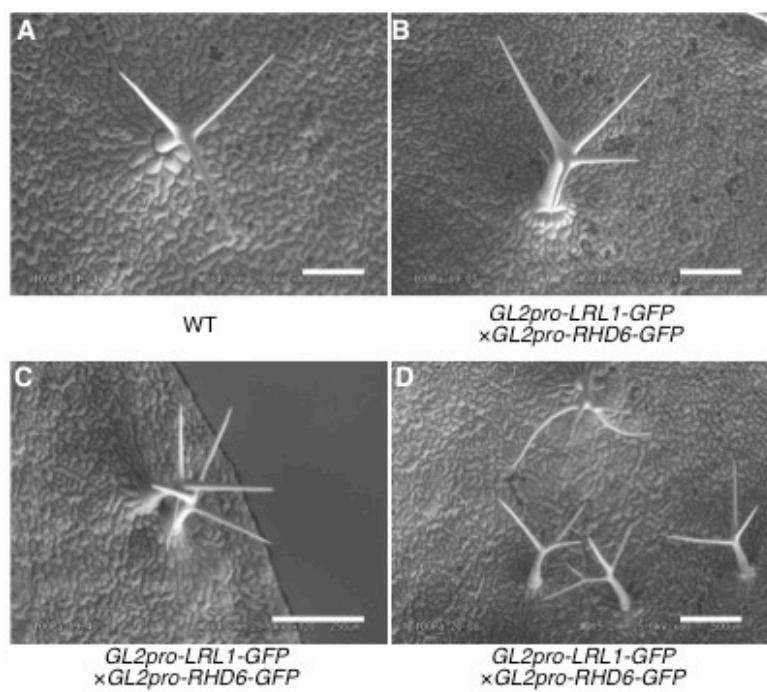
**Supplemental Figure S3.** Expression Patterns and Intensities of bHLH-GFP Fusion Proteins Driven by the *GL2* Promoter.

The GFP fluorescence signals in transgenic roots harboring *GL2pro-RHD6-GFP* (A), *GL2pro-RSL1-GFP* (B), *GL2pro-RSL2-GFP* (C), *GL2pro-LRL1-GFP* (D), and *GL2pro-LRL2-GFP* (E) are shown. Bar = 100  $\mu$ m



**Supplemental Figure S4.** Root Hair Development Patterns of the Transgenic Plants Harboring the *GL2* Promoter-driven bHLH-GFP Genes.

PI-stained Epidermal cells of wild-type (**A**) and *gl2-5* (**B**) roots, and transgenic roots harboring *GL2pro-RHD6-GFP* (**C**), *GL2pro-RSL1-GFP* (**D**), *GL2pro-RSL2-GFP* (**E**), *GL2pro-LRL1-GFP* (**F**), *GL2pro-LRL2-GFP* (**G**), *GL2pro-VP16-GL2 $\Delta$ N* (**H**), and *GL2pro-LRL1-GFP* and *GL2pro-RHD6-GFP* (**I**) are shown. H and N cell files are marked by "H" and "N", respectively. Ectopic root hairs developing from N cell files and branching root hairs are indicated by arrowheads and arrows, respectively. Bar = 25  $\mu$ m



**Supplemental Figure S5.** Trichome Phenotypes of Transgenic Plants Harboring Both *GL2pro-LRL1-GFP* and *GL2pro-RHD6-GFP*.

Trichomes of wild-type plants (**A**) and transgenic plants harboring both *GL2pro-LRL1-GFP* and *GL2pro-RHD6-GFP* (**B** to **D**) are shown. Bar = 250  $\mu$ m

Site name	L1 box-like sequence
<i>PLD1-S</i>	5'-ATAGTATAAAGATCACTGATTGATTAAT <b>TAAATGT</b> TAAGAAAATAA-3'
<i>CESA5-S</i>	5'-ACAGAAGAACAAAATAGAGGGAAATTAAT <b>TAAATGT</b> AAAGGGTGATC-3'
<i>MYB23-S</i>	5'-ATTATAAACATCTTGTGAAAAAGAATT <b>TAAATGT</b> ACCCATTTG-3'
<i>PAP2-S</i>	5'-AAATAATTAAATAATTAAATCAGATGAT <b>TAAATGT</b> AATCAAATAAT-3'
<i>MYB113-S</i>	5'-ATGCACATAATTACTTAAGAAC <b>TAAATGT</b> TGCATTGATTC-3'
<i>RHD6-S</i>	5'-TTACTCGCTCGGCCCATCAAAATGAG <b>TAAATGT</b> TAACTGGTTG-3'
<i>RSL1-S1</i>	5'-TATAACAAACAAAAATAAAACTACATC <b>TAAATGT</b> CATCATTTAAT-3'
<i>RSL1-S2</i>	5'-CAAAACAAGTACCAACGAACGACCAAG <b>TAAATGT</b> GGTATTTTT-3'
<i>RSL2-S1</i>	5'-TAGAGAACATGAGAGATA <b>TAAATGT</b> AAACACATAAT-3'
<i>RSL2-S2</i>	5'-AGTTTCGTAAATTAGATGGTTAATTT <b>TAAATGT</b> TTCATCAAAAA-3'
<i>LRL1-S2</i>	5'-GACTACAAAATACAGACCTCGAAAC <b>TAAATGT</b> ATTAGTTAATG-3'
<i>LRL2-S</i>	5'-CAAATAAAATAAACATATCTTATTC <b>TAAATGT</b> ATTTCATTCT-3'
Frequently appearing base	5'-AAA-A <sup>A</sup> AAAAAA--A-A-A-T-AA--A- <b>TAAATGT</b> -A-----T <sup>A</sup> T--3'

**Supplemental Figure S6.** Sequences Surrounding the L1 Box-like Sites Recognized by GL2.

DNA sequences surrounding the L1 box-like sites that have confirmed to be bound to GL2 individually by ChIP analysis are aligned. The sites *CESA5-S*, *MYB23-S*, *PAP2-S*, and *MYB113-S* correspond to the L1 box-like sites 802-, 2,372-, 1755-, and 837-base upstream from their initiation codons, respectively. The other sites are the same as those shown in Table II. The sites, *RSL2-S3-1*, *RSL2-S3-2*, *LRL1-S1-1*, *LRL1-S1-2*, and those in the *TT8* promoter region are omitted because they were examined for GL2 binding to more than one copy of the L1 box like-sequence. The L1 box-like sequence is highlighted. Frequently appearing bases (at 50% or higher) at each position are shadowed. The sequence composed of the frequently appearing bases is shown below the alignment.